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Finanční analýza společnosti Qingdao Beer

Financial Analysis of Qingdao Beer Company

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1. Introduction
2. Description of the financial analysis methodology
3. Characterization of Qingdao Beer company
4. Financial analysis of Qingdao Beer company
5. Conclusion

Bibliography
List of Abbreviations
Declaration of Utilization of Results from the Bachelor Thesis
List of Annexes
Annexes

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The declaration
“Herewith I declare that I elaborated the entire thesis, including all annexes, independently.”

Ostrava dated……..

..……...…….
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Contents

1 Introduction

Do you know anything about the Qingdao Beer Company? What is the company's basic situation and how the financial statements of it? The main objective of the thesis is to answer such questions by examining the financial works of this company. In this thesis, we will use some financial analysis methods to analyse the company's balance sheet, cash flow and income statement from the year 2006 to 2010, and then we will have an overall evaluation of this company.

In chapter 2, the financial analysis methodology will be described which will be used for analyzing the financial performance of the Qingdao Beer Company. There are two main parts in this chapter: one is common-size analysis, the other is financial ratio analysis. In common-size analysis we will divide it into vertical common-size analysis and horizontal common-size analysis. Using the common-size analysis we can have a general understanding of the company's financial structure and its development trends. The financial ratio analysis focuses on three main areas such as: activity ratios, liquidity analysis and solvency analysis. We can know the company's financial statements more detail in this chapter.

In chapter 3, we will have a general understanding of Qingdao Beer Company. In this chapter, we will describe the company's history, achievements of the company, the development of the company and the market. By using such information, we can have a general understanding of the situation of this company.

Next, we will use the financial analysis methods to analyse the company's financial statements. The data we use in this chapter are extracted from the company's annual reports. This chapter represents the main part of this work: the common-size analysis will be used to analyse the general situation of the financial statements of the Qingdao Beer Company, where we can also find the financial structure changed from 2006 to 2010. Then we will focus on the financial ratio analysis. Activity ratios can be used to measure how well the Qingdao Beer Company uses its assets, here we will use many ratios such as the total assets

turnover, receivables turnover and so on. In the liquidity analysis, we use the current ratio and quick ratio to measure the liquidity of this company's ability to meets its short-term liabilities. Then we will use solvency analysis to measure the company's ability to meet its long-term obligations. At last, we will use profitability analysis，DuPont analysis and influence quantification to examine the ability to generate profit from invested capital in the form of return during a period of the company in more detail. It can give us a better understanding of the company's financial situation by study each data in such meticulous way, these ratios we get can be used as the important index to report the company.

Then, at the end of this thesis, we will go back to have an overall study of all the things we have did in this thesis. In the conclusion, all the main results and reasons would be put together in with we can get a general appraisal of the company. In this chapter, we can finally get to know how the company's financial statement used to be and what it will be like in the future.

2 Description of the Financial Analysis Methodology

In order to have a scientific way to know the company's financial statement, we need to use many financial study methods. In this chapter, we will introduce some financial analysis methods[1] which could help us to have a deep understanding of Qingdao Beer Company. Then, we will use these methods to calculate the financial data in chapter 4.

2.1 Common-size Analysis

We can use common-size analysis to know the trends and major differences of the company's financial statements by using a common denominator or reference item. There are two types of common-size analysis: vertical common-size analysis and horizontal common-size analysis.

Vertical common-size analysis can be used for analyzing financial information in a point time. By means of vertical analysis, we compare the accounts in a given period to a benchmark item in that same year. For the income statement, the benchmark is revenues; for the balance sheet, the benchmark is total assets. By using the vertical common-size analysis we can examine the structure of the company's assets in a given period, and comparing it in different years allows us to find out the changes in the composition of assets.

Horizontal common-size analysis is used to compare the company's financial structure changes over time. Usually we chose a base year as the benchmark and then calculate all subsequent years relative to that base. The horizontal common-size analysis is a very useful way for us to know a company's develop trend.

[1] In this chapter, most of these methodology are based on the book:
Thomas R.Robinson, Hennie van Greuning, Elaine Henry, Micheael A. Broihahn/ International financial statement analysis/ 1 edition/publisher: wiley/ November 10, 2008/ 864 pages/ ISBN-10: 0470287667

2.2 Financial Ratio Analysis

Financial ratios analysis is the financial analysis method that compares the financial data in the form of financial ratios to assess the financial health of the company

2.2.1 **Activity Ratios**

Activity ratios can be used to measure how well a company uses its assets. It can help us evaluate the benefits produced by specific assets. We use turnover ratios and number of days to measure the activity ratios.

Turnover ratio is one of the most important indexes to show the companies' operating capacity. A high turnover ratio is a sign that the company is producing and selling its goods or services very quickly.

A) Total assets turnover

Total assets turnover is the ratio between the enterprise's total business revenue and average total assets. It shows the speed of company to take back whole assets by its revenue. The higher total assets turnover ratio means the enterprise has a more effective way to use its total assets and stronger ability to get profit.

The way to calculate total asset turnover is:

$$\text{Total asset turnover} = \frac{\text{Total revenue}}{\text{Average total assets}} \tag{2.1}$$

B) Receivables turnover

The receivables turnover ratio is a measure of the speed for a company to receive its receivables and how the company manages its assets. In a giving year, the more receivables turnover the quicker to get receivables, so the company has a better liquidity and debt paying ability. If the receivables turnover drops, it means the company couldn't get its debt as soon as possible, it's a bad signal to the company.

$$\text{Receivables turnover} = \frac{\text{Total revenue}}{\text{Average receivables}} \tag{2.2}$$

C) Inventory turnover

Inventory turnover is the ratio of cost of goods sold to average inventory. From the ratio we can know how many times a company's inventory is sold and replaced over a period. This ratio should be compared against industry averages. A low turnover implies poor sales and, therefore, excess inventory. A high ratio implies either strong sales or ineffective buying. High inventory levels are unhealthy because they represent an investment with a rate of return of zero. It also opens the company up to trouble should prices begin to fall.[2]

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}} \tag{2.3}$$

D) Working capital turnover

Working capital turnover is the ratio of total revenue to average working capital, to show how efficiently working capital is employed. Through comparison and analysis of the indicators, we can promote the internal management of enterprises. The full and effective utilization of current assets, such as lower costs, mobilize the temporarily spare monetary resources for short-term investments to create income, it can also promote measures to expand sales, improve the comprehensive efficiency of current assets.

$$\text{Working capital turnover} = \frac{\text{Total revenue}}{\text{Average working capital}} \tag{2.4}$$

Another way for us to measure how efficiently a company's management puts various assets to use is operating cycle. The operating cycle is the days between the times a company puts its investment and the time that investment produces cash. It's the length of time a company changes an investment into cash

E) Number of days of inventory

From number of days of inventory, we can determine how long it takes a company to sell out all its inventories. Fewer numbers of days means faster inventories turn into cash.

[2] From the web site:
http://www.investopedia.com/terms/i/inventoryturnover.asp#ixzz1snEPyi6x

A high number of days of inventory indicate that there is a lack of demand for the product being sold. A low number of days of inventory ratio may indicate that the company is not keeping enough stock on hand to meet demands.

$$\text{Number of days of inventory} = \frac{\text{Inventory}}{\text{Average day's cost of goods sold}}$$

$$= \frac{\text{Inventory}}{(\text{Cost of goods sold}/365)} \tag{2.5}$$

F) Number of days of receivables

Number of days of receivables is the ratio of accounts receivable to average day's revenue. It can show the days of a company to collect the account receivables in cash.

$$\text{Number of days of receivables} = \frac{\text{Accounts receivable}}{\text{Average day's revenue}}$$

$$= \frac{\text{Accounts receivable}}{(\text{Revenue}/365)} \tag{2.6}$$

G) Number of days of payables

We can find out how long it takes a company, on average, to go from creating a payable to paying for it in cash by numbers of days of payables.

$$\text{Number of days of payables} = \frac{\text{Accounts payable}}{\text{Average day's purchases}}$$

$$= \frac{\text{Accounts payable}}{(\text{Purchases}/365)} \tag{2.7}$$

And the way to get purchases is:

$$\text{Purchases=COGS + Ending inventory – Beginning inventory} \tag{2.8}$$

Where COGS is the short of cost of goods sold.

H) Operating cycle

Operating cycle is a measure of how long it takes from purchase of raw materials to the account receivable back into cash.

The shorter the operating cycle, the faster a business gets a return on investment for the inventory it stocks.

Operating cycle= Number of days of inventory + Number of days of receivables (2.9)

I) Net operating cycle

The net operating cycle can show how long it takes to get cash back from the investment inventory and accounts receivable. If these days are so long, means the company reduces its liquidity needs.

Net operating cycle=Operating cycle – Number of days of payables (2.10)

2.2.2 **Liquidity Analysis**

Liquidity ratios are ratios that come from the balance sheet and hence measure the liquidity of the company as on a particular day. We use liquidity analysis to measure company's ability to meets its immediate or short-term liabilities and obligations.

A) Current ratio

Current ratio is the ratio of current assets to current liabilities, it is used to measure corporate's current assets that can be changed into cash to repay debt before short-term debt maturity.

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}} \quad (2.11)$$

B) Quick ratio

Quick ratio is the ratio of most liquid assets to current liabilities of the enterprise. Liquid assets include cash, short-term investments, receivables, accounts receivable, and other receivables, that could be realized in a relatively short time. In liquid assets,

the inventory, other current assets and non-current assets due in 1 year should not be counted.

$$\text{Quick ratio} = \frac{\text{Cash+Short term marketable investment+Receivables}}{\text{Current liabilities}} \quad (2.12)$$

2.2.3 **Solvency Analysis**

Solvency refers to a company's ability to fulfill its long-term debt obligations. Assessment of a company's ability to pay its long-term obligations generally includes an in-depth analysis of the components of its financial structure. Solvency ratios provide information regarding the relative amount of debt in the company's capital structure and the adequacy of earnings and cash flow to cover interest expenses and other fixed charges as they come due.[3]

A) Debt-to-assets ratio

The debt-to-assets ratio is a measure of the proportion of assets that is financed with debt.

If the ratio is less than 0.5, it means most of the company's assets are financed through equity. If the ratio is greater than 0.5, most of the company's assets are financed through debt. Companies with high debt-to-asset ratios could be in danger if creditors start to demand repayment of debt.

$$\text{Debt} - \text{to} - \text{assets ratio} = \frac{\text{Total debt}}{\text{Total assets}} \quad (2.13)$$

B) Long-term debt-to-assets ratio

Long-term debt-to-assets ratio is the ratio of long-term debt to total assets. It's an indicator of the long-term solvency of a company. The higer the level of long-term debt, the more important it is for a company to have positive revenue and steady cash flow. It's very helpful for management to check its debt structure and determine its debt capacity.

$$\text{Long} - \text{term debt} - \text{to} - \text{assets ratio} = \frac{\text{Long-term debt}}{\text{Total assets}} \quad (2.14)$$

[3] International financial statement analysis (Thomas R.Robinson, Hennie van Greuning, Elaine Henry, Micheael A. Broihahn/ November 10, 2008/ page.228)

C) Debt-to-equity ratio

Debt-to-equity ratio is the ratio of an enterprise's liabilities to shareholders' equity. It reflects the strength of financial structure, and the protection level of creditors' capital by shareholders.

$$\text{Debt} - \text{to} - \text{equity ratio} = \frac{\text{Total debt}}{\text{Total shareholders}' \text{ equity}} \tag{2.15}$$

D) Financial leverage

Financial leverage is the ratio of total assets to average total shareholders' equity, which can be used to compare different companies' capital structure.

$$\text{Financial leverage} = \frac{\text{Total assets}}{\text{Average total shareholders}' \text{equity}} \tag{2.16}$$

2.2.4 **Profitability Analysis**

Profitability ratios can be used to measure the ability to generate profit from invested capital in the form of return during a period. Profitability reflects a company's competitive position in the market and the quality level of its management. The higher the profitability ratios, the better the competitive position of the company.

We can divide profitability ratios into two types: margins and returns.

A) Gross profit margin

Gross profit margin is the ratio of gross profit to total revenues. From this ratio, we can know how well a company controls its costs, and the manufacturing of its products. The larger the gross profit margin, the better for the company.

$$\text{Gross profit margin} = \frac{\text{Gross profit}}{\text{Total revenue}} \tag{2.17}$$

B) Operating profit margin

Operating profit margin is a measurement of what proportion of a company's revenue is left over, before taxes and other indirect costs, after paying for variable costs of production as wages, raw materials, etc. It is a measure of overall operating efficiency, incorporating all of the expenses of ordinary, daily business activity.

$$\text{Operating profit margin} = \frac{\text{Operating income}}{\text{Total revenue}} \tag{2.18}$$

C) Net profit margin

Net profit margin is an important indicator of the profitability of the company, it's the profit margin after deduction of all costs and expenses.

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Total revenue}} \tag{2.19}$$

D) Pretax profit margin

Using the pretax profit margin, we can know the effects of taxes on the company's profitability. It's the ratio of earnings before taxes to total revenue.

$$\text{Pretax profit margin} = \frac{\text{Earning befor taxes}}{\text{Total revenue}} \tag{2.20}$$

E) Operating return on assets

An operating return on assets, sometimes known as OROA, is a type of calculation designed to aid business owners in determining what type of net profit is actually being generated by a business effort. The basic formula for calculating the operating return on assets calls for identifying both the net amount of income from various sources, including interest on holdings. The total amount of net income that is generated by the business is then divided by the value of the company's assets to identify the current OROA for the operation.[4]

$$\text{Operating return on assets} = \frac{\text{Operating income}}{\text{Average total assets}} \tag{2.21}$$

[4] It's based on the website: http://www.wisegeek.com/what-is-operating-return-on-assets.htm

F) Return on assets

Return on assets is the ratio of net income to average total assets. It is an important indicator to evaluate the enterprise assets operational benefits. It measures the amount of profit earned relative to the firm's level of investment in total assets.

$$\text{Return on assets} = \frac{\text{Net income}}{\text{Average total assets}} \tag{2.22}$$

G) Return on equity

Return on equity is used to assess the company's profitability and it's an index for a comparison of the different companies. This ratio can be used as an index of company's profitability, showing the return on capital the shareholders could have.

We can't usually compare the return on equity ratio between different industries' companies.

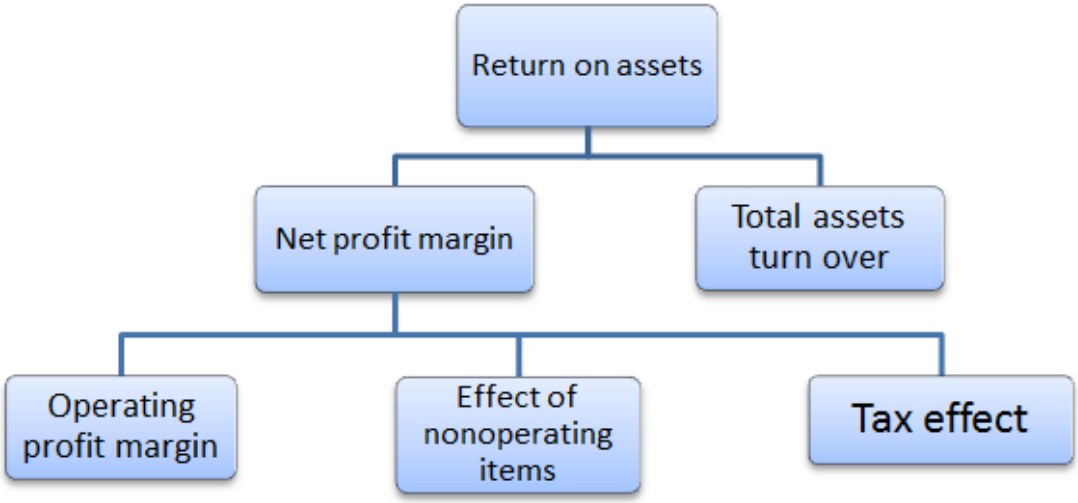
$$\text{Return on equity} = \frac{\text{Net income}}{\text{Average shareholders}'\text{equity}} \tag{2.23}$$

2.3 DuPont Analysis

DuPont analysis is a method of performance measurement that was started by the DuPont Corporation in the 1920s. DuPont analysis uses the ROE as the core of financial indicators, through the relationship between financial indicators, we can analyse the profitability of enterprises more systematically. Profitability, operating efficiency and financial leverage are the three main parts of DuPont analysis.

Firstly, we can begin as an analysis of the return on assets. As Exhibit 1 shows us, we can break the return on assets into two parts: net profit margin and total assets turnover. The net profit margin is the ratio of net income to revenues, the total assets turnover is the ratio of revenues to average total assets. In order to have a deeper understanding of net profit margin, we then break this ratio into three components: operating profit margin, effect of nonoperating items and tax effect. Which is the same as: net income/revenues = (operating income/revenues) × (income before taxes/operating income) × (1 – taxes/income before taxes)

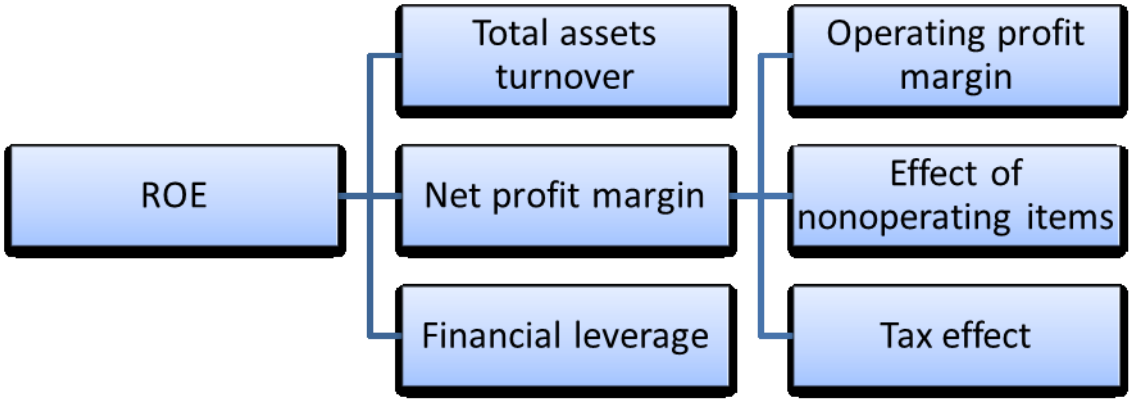
Exhibit 1 DuPont Model of Return on Assets



Source: International financial statement analysis (Thomas R.Robinson, Hennie van Greuning, Elaine Henry, Micheael A. Broihahn/ November 10, 2008/, page.301)

Then, we can put the return on shareholders' equity into the DuPont model:

Exhibit 2 DuPont Analysis of Return on Equity



Source: International financial statement analysis (Thomas R.Robinson, Hennie van Greuning, Elaine Henry, Micheael A. Broihahn/ November 10, 2008/ page.301)

We can use a formula to present exhibit 2 as：

$$\text{Return on equity} = \frac{\text{Operating income}}{\text{Revenues}} \times \frac{\text{EBIT}}{\text{Operating income}} \times \left(1 - \frac{\text{Taxes}}{\text{EBIT}}\right) \times \frac{\text{Revenues}}{\text{Average total assets}} \times \frac{\text{Average total assets}}{\text{Average shareholders'equity}} \tag{2.24}$$

We separate the return on equity ratio into some relation parts enables to analyze indicators which change have cased change in the basic ratio and which component ratios contributed to the change in basic ratio at most.

2.4 Influence Quantification

Influence quantification can be able used to analyze the reasons of changes in ROE over time for a company. In this way, we can find out which indicator has caused change in the basic ratio, and which component ratios contributed to the change in basic ratio at most. It is in the same way with DuPont analysis that divides ROE into three parts: total assets turnover, net profit margin and tax effect. The two most important methods for influence quantification are method of gradual changes and logarithmic method.

Method of gradual changes enables to quantify the change in the basic ratio caused by change in the component ratio. As there are three main parts of ROE, so it can be calculated as:

$$\begin{aligned} \Delta x_{a1} &= \Delta a_1 \cdot a_{2,0} \cdot a_{3,0} \\ \Delta x_{a2} &= a_{1,1} \cdot \Delta a_2 \cdot a_{3,0} \\ \Delta x_{a3} &= a_{1,1} \cdot \Delta a_{2,1} \cdot a_3 \end{aligned} \tag{2.25}$$

In this formula: x is the basic ratio, Δx is the absolute change in the basic ratio，a is component ratio and Δa is absolute change in the component ratio.

Logarithmic method is taken into account the current change of all factors studied. As one advantage of it, we need just one formula for the impact quantification regardless of how many component ratios we have. Impact of the i-th component ration on the change in the basic ratio is calculated as follows:

$$\Delta x_{a_i} = \frac{InI_{a_i}}{InI_x} \cdot \Delta x \tag{2.26}$$

In which X is basic ratio, Δx is absolute change in the basic ratio, $I_x = \frac{x_1}{x_0}$ is the index of change in basic ratio, $I_a = \frac{a_1}{a_0}$ is the index of change in component ratio.

3 Characterization of Qingdao Beer Company

In this chapter we will introduce the general understanding of the company's basic situation[5].

3.1 Company Profile

Qingdao Beer Co., Ltd_(Tsingtao Brewery Company)., one of the oldest beer producers in China, was founded in 1903 by German and British merchants under the name Nordic Brewery Co., Ltd. Tsingtao Branch. The brand value of Tsingtao Beer is as high as RMB 36.625 billion, making Qingdao Beer the top Chinese beer company among the world's top 500 brands.

On July 15, 1993, Qingdao Beer became the first-ever Chinese company to be listed on the Hong Kong Stock Exchange (stock code 0168). On August 27, 1993, it was listed on the Shanghai Stock Exchange (stock code: 600600), making Qingdao Beer the first Chinese company to be listed in both Mainland China and Hong Kong.

Due to numerous strategic mergers and acquisitions, purchases of insolvent companies, reorganization, and joint-venture partnerships in the late 1990s, the company now has more than 50 breweries in 18 provinces, municipalities and autonomous regions, further strengthening its leadership in the Chinese market.

Qingdao Beer exports to more than 70 countries and regions, including the USA, Japan, Germany, France, UK, Italy, Canada, Brazil and Mexico. The Barth Report, an authoritative publication which assesses the global beer industry, ranked Qingdao Beer as the 6th-largest brewery in the world based on total yield from 2006 to 2008.

[5] The information is extracted from the company's Website: http://stock.tsingtao.com.cn/

3.2 Achievements of the Company

Since 1949, Qingdao Beer has received numerous awards and recognitions in some of the most prestigious beer competitions held in China and around the globe. Top awards and honors include:

Financial Times' "Top 10 Chinese Global Corporate Brands" in 2005 and 2008 (including four recognitions in 2008 in the categories of brand equity, high-quality product & service, and overseas brand equity).

People's Daily Online presented Qingdao Beer with a People's Social Responsibility Award, 2008.

Grand prize at the Asia Brand Ceremony, 2007.

The Development and Application of Brewing Technology with High Efficiency and Low Resource Consumption developed by Qingdao Beer was granted the National Award for Science and Technology Progress in 2006.

No. 68 in Reputation Institute/Forbes' "The World's Most Reputable Companies", 2006.

Gold medals in international contests held in Belgium (1991), Singapore (1993) and Spain (1997)

Three first-place awards in beer contests in the United States during the 1980s

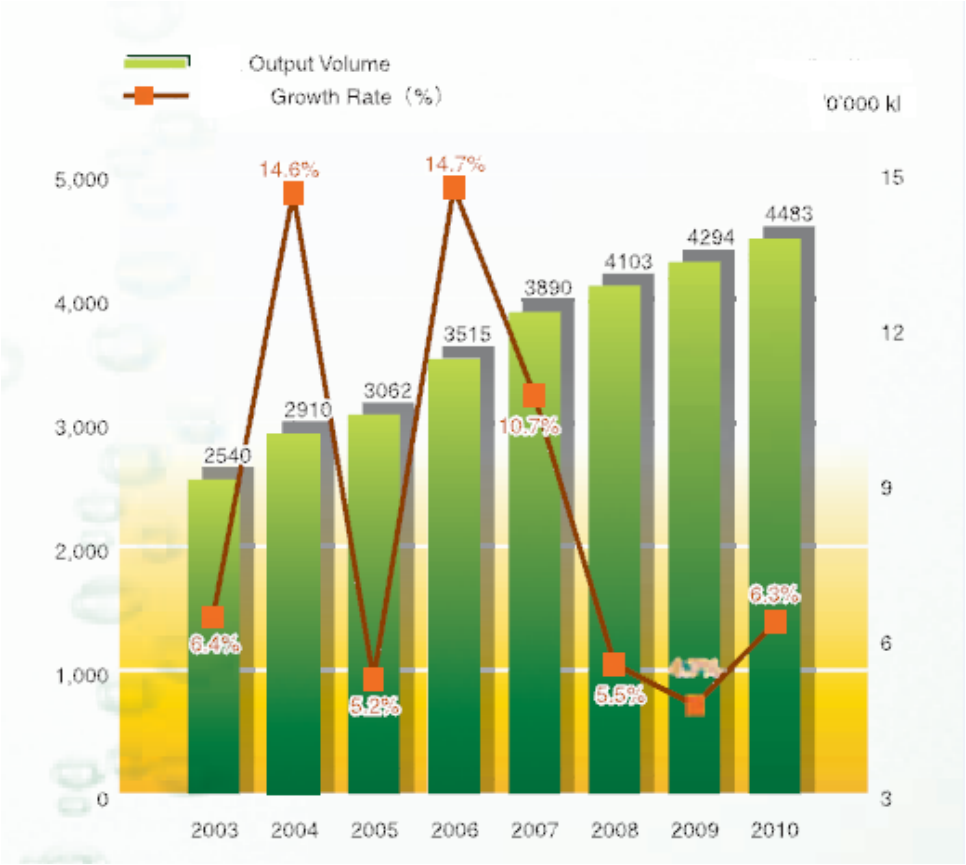
Gold medal at the Munich International Expo, 1906.

3.3 Enterprise Development and Market Environment

3.3.1 Analysis of the Industry

We can intuitively get to know the Chinese beer industry development from 2003 to 2010 from Chart 3.1

Chart 3.1 Changes in Output Volume of Chinese Beer Industry



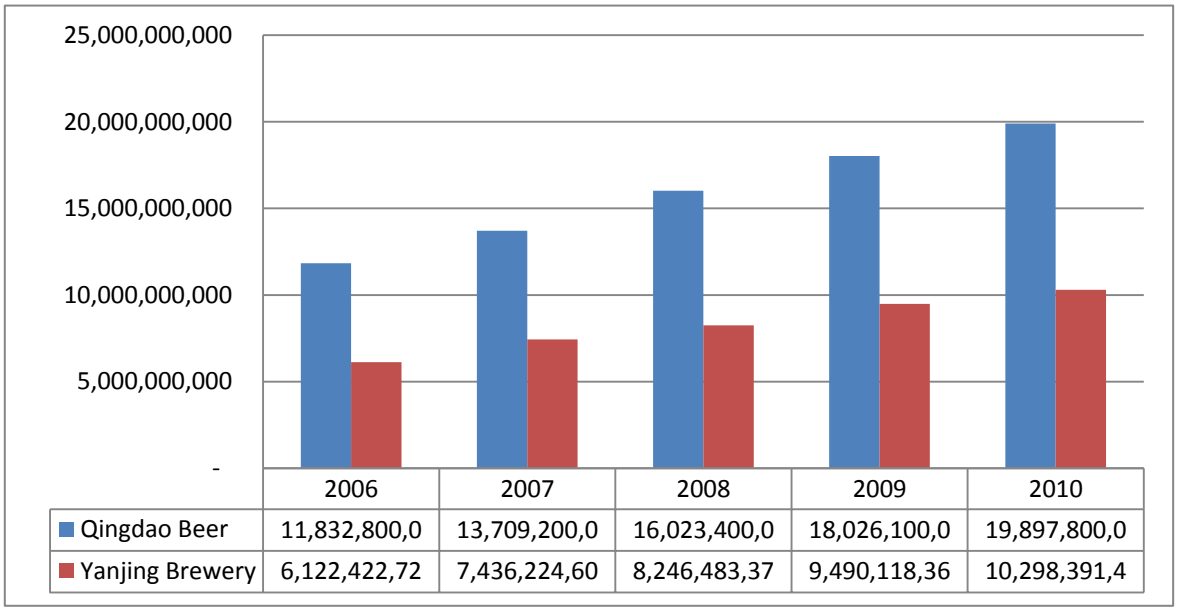
Source: The annual report of Qingdao Beer Co., LTD. (2010, p 47)

As China's economy continued to grow, the beer market kept its pace to steady growth, the full-year output of beer reached 448.3 million hl.

The whole industry became more consolidated through the merger and acquisition among the large breweries, new constructions and capacity expansion that the market share of the top 4 breweries had reached nearly 60% (Qingdao Beer rank 1st in China).

Then, we can use the financial data to compare the Chinese top 2 beer companies: Qingdao Beer and Yanjing Brewery.

Chart 3.2 Total Revenue of Qingdao Beer and Yanjing Brewery



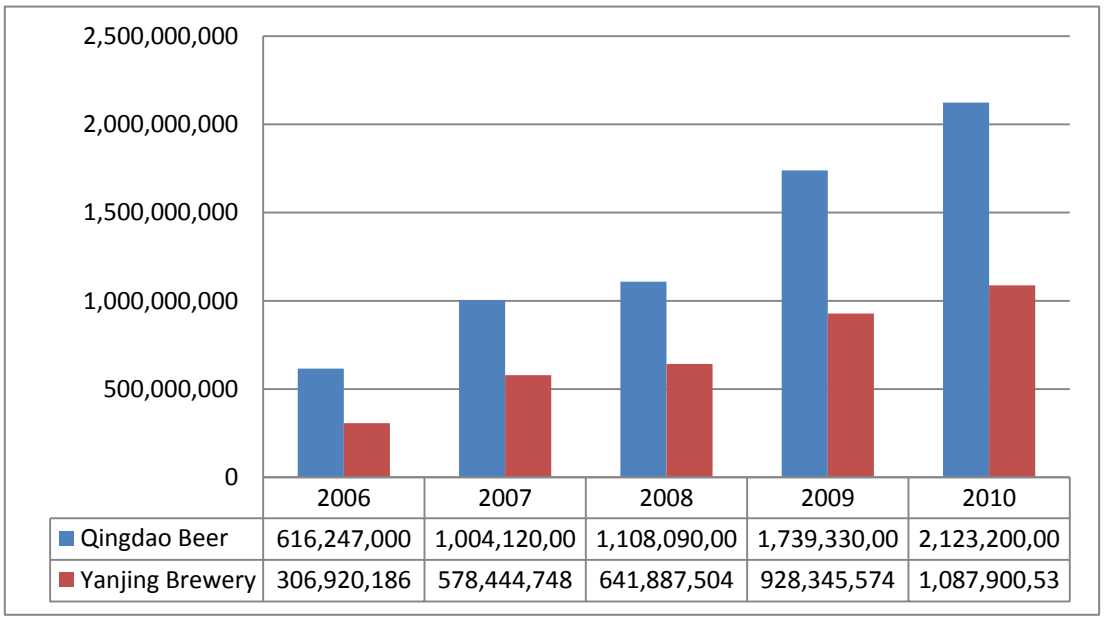
	2006	2007	2008	2009	2010
Qingdao Beer	11,832,800,0	13,709,200,0	16,023,400,0	18,026,100,0	19,897,800,0
Yanjing Brewery	6,122,422,72	7,436,224,60	8,246,483,37	9,490,118,36	10,298,391,4

Souse: the financial data of Yanjing Brewery is form the Annual Report of Beijing Yanjing Brewery Co.,Ltd.(2006-2010). Author

The total revenue of Qingdao Beer Company is as double as Yanjing Brewery Company's, and the growth rate of Qingdao Beer is a little faster. It's due to the Qingdao Beer Company has a bigger market share and the company fully grasp the opportunities to further expand the enterprise scale to be the leader in the industry with its advantages in brand, management, technologies and funds.

From the Chart 3.2, we can see the leadership of Qingdao Beer Company in China's beer industry. The company almost didn't influenced by the financial crisis, and kept its revenues increasing during 2006 to 2010. On the other side, even if the Yanjing Brewery Company has kept its growth during the five years, but it has slowed down in 2008 as the reason of the financial crisis. By comparing the different situations of these two companies, we can get to know the Qingdao Beer Company has a better ability to get though bad external environment.

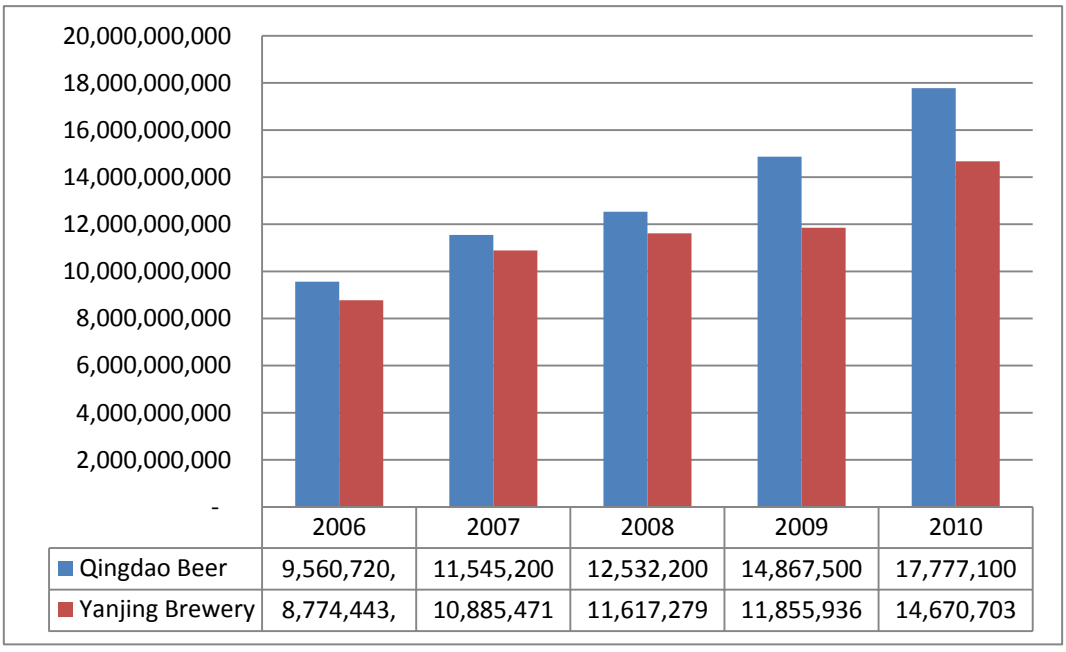
Chart 3.3 Total Profit of Qingdao Beer and Yanjing Brewery



Souse: The financial data of Yanjing Brewery is form the Annual Report of Beijing Yanjing Brewery Co.,Ltd.(2006-2010). Author

Qingdao Beer Company's total profit is almost as double as Yanjing Brewery Company's, this is the same situation with Chart 3.2. So we can judge both of the two companies have almost same net profit margin.

Chart 3.4 Total Assets of Qingdao Beer and Yanjing Brewery



Souse: The financial data of Yanjing Brewery is form the Annual Report of Beijing Yanjing Brewery Co.,Ltd.(2006-2010). Author

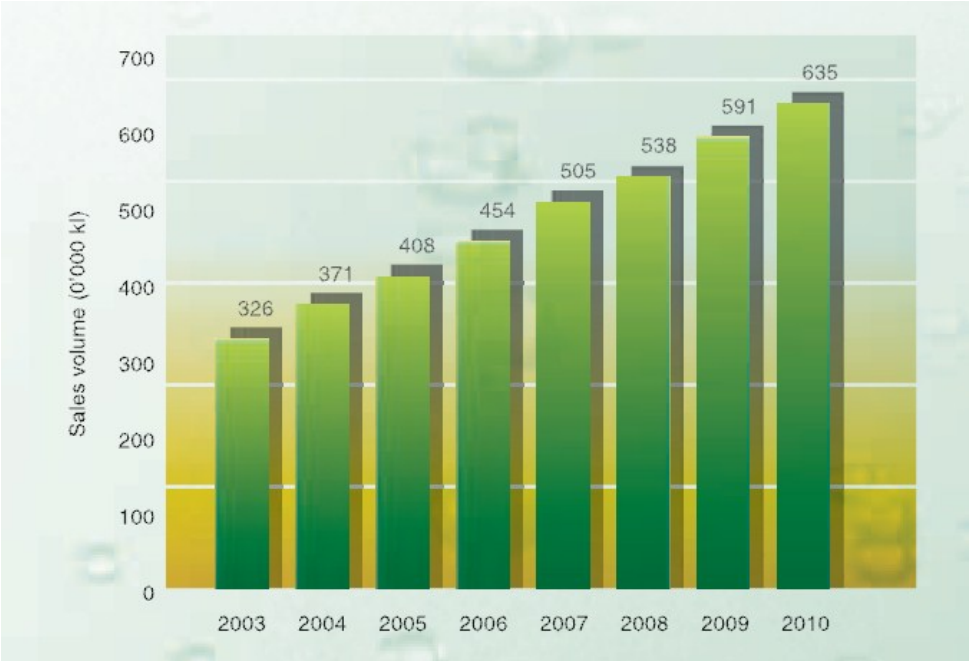
In Chart 3.4, the total assets of Qingdao Beer Company are a little more than Yanjing Brewery Company's. And in the year of 2009, the total assets of Yanjing Brewery Company almost kept at the same level with 2008, this was mainly because of the financial crisis which let the company in a relative terrible financial statement. On the other side, the total assets of Qingdao Beer Company increased a lot in that year, it because in 2009, the cash increased a lot, which was mainly due to the increase of net cash-flow from the business activities and the proceeds from the exercising of the warrants of the bonds with warrants issued by the company. And we can compare Chart 3.4 with Chart 3.2 to get the conclusion of that the Qingdao Beer Company has a better develop trend of total assets turnover than Yanjing Brewery Company.

By comparing the top 2 beer companies of China's, we can find the Qingdao Beer Company has an obvious leadership in this industry. Though it almost has a same develop trend with Yanjing Brewery Company, the company has a better ability face to external crisis.

3.3.2 Brief Analysis to the Sales Volume and Product Mix of 2010

In this part we will get to know the company's development trends.

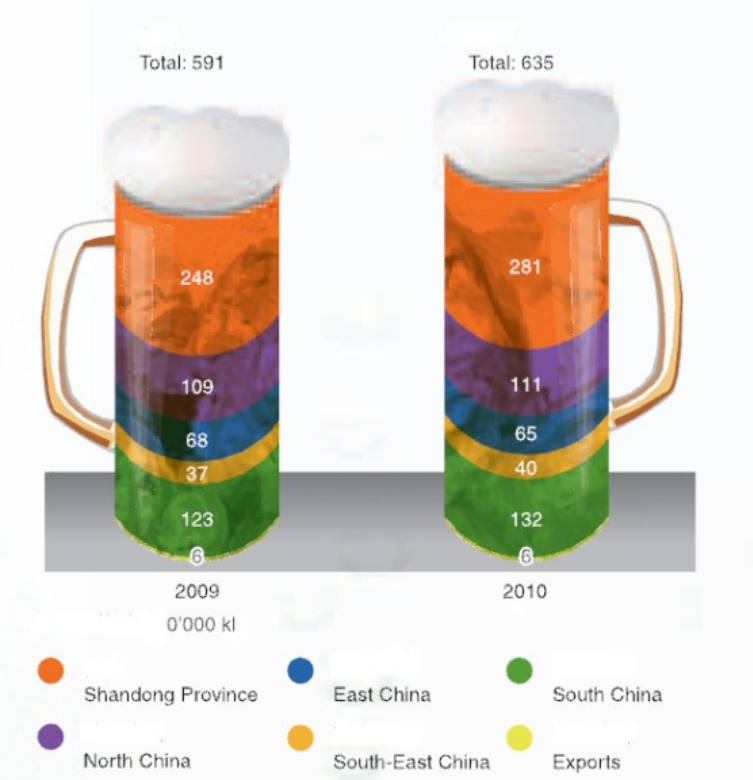
Chart 3.5 Trend of Growth of Sales Volume



Source: The annual report of Qingdao Beer Co., LTD. (2010, p 47)

In Chart 3.5, we can see it clearly that the sales volume of Qingdao Beer continued to grow in recent years.

Chart 3.6 Sales Volume of Beer in Geographical Regions



Source: The annual report of Qingdao Beer Co., LTD. (2010, p 48)

The main sales of Qingdao Beer is in Shandong Province (the main company of Qingdao Beer is in Qingdao, Shandong), and it has increased in proportion of total sales. The sales in east China has decreased in the period years.

And on the other side, in the 2010, the company started the projects of relocation and expansion in the production bases including Qingdao, Shanghai, Fuzhou, Zhuhai and Shenzhen, further expanding the company's production capacity and scale, and improving its national market layout.

4 Financial Analysis of Qingdao Beer Company

In this chapter[6], we will get the financial performance of this company by means of financial analysis methods which are described in chapter 2, and in a further step we would analyze the development situation of this company by using the data we get. This chapter is divided by three parts: common-size analysis, financial ratio analysis and DuPont analysis.

4.1 Common-size Analysis

In this part, we will use common-size analysis to analyze the general situation of Qingdao Beer Company. In vertical analysis, we can get a sense of how the company's profitability changed over time by examining each cost and net profit as a percentage of revenues over the year from 2006 to 2010. We also can get a general understanding of the company's asset structure changed in the same way. In horizontal analysis, we will use the year of 2006 as the benchmark and then restate 2007-2010 relative to 2006, in this way we can intuitive to understand the company's development in each parts.

4.1.1 Vertical Common-size Analysis

Using the theory in chapter 2 to calculate Qingdao Beer Company's income statement data, we choice revenues as the benchmark and make other items as a percentage of it to have a compare. In this way, we get the vertical common-size analysis of income statement in Table 4.1.

[6] In this part, all the data of Qingdao Beer Company's balance sheet, income statement, and cash flow are in the annex. All the formulas are in the chapter 2. The current units are Chinese Yuan

Table 4.1 Vertical Common-size Analysis of Income Statement

	2006	2007	2008	2009	2010
Revenues	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of goods sold	59.45%	58.37%	59.34%	57.06%	56.46%
Gross profit	40.55%	41.63%	40.66%	42.94%	43.54%
Selling, general, and administrative expenses	36.24%	35.02%	34.47%	34.18%	33.86%
Operating income	4.31%	6.61%	6.19%	8.77%	9.68%
Non-operating income	1.10%	1.06%	1.04%	1.46%	1.48%
Non-business expenditure	0.15%	0.26%	0.22%	0.35%	0.29%
Non-current assets disposal loss	0.05%	0.08%	0.09%	0.23%	0.20%
Earnings before taxes	5.21%	7.32%	6.92%	9.65%	10.67%
Income tax	1.51%	2.96%	2.34%	2.44%	2.71%
Net income	3.70%	4.36%	4.58%	7.21%	7.96%

In this table, we can see the percentage of cost of goods sold has changed a little in each year, and it has only increased in 2008, it resulted in the decrease of percentage of gross profit in the same year. But in generally, the cost of goods sold has taken a big part of all the revenues which nearly 60 percentage. The relative selling, general, and administrative expenses have declined slowly in this period years, which has decreased from 36.24% to 33.86%. As a result the operating income has increased relative to the total revenues year by year. After we calculate non-operating income, non-business expenditure, non-current assets disposal loss and income tax, finally we can get the number of net income which was 3.70 percentages of total revenue in the year of 2006, and increased to 7.96 percentages in 2010.

Then, we extract the data from annex and Table 4.1 to examine changes of profitability by comparing various expenses (include net non-operating income) and net income

Chart 4.1 Qingdao Beer Company Income Statement

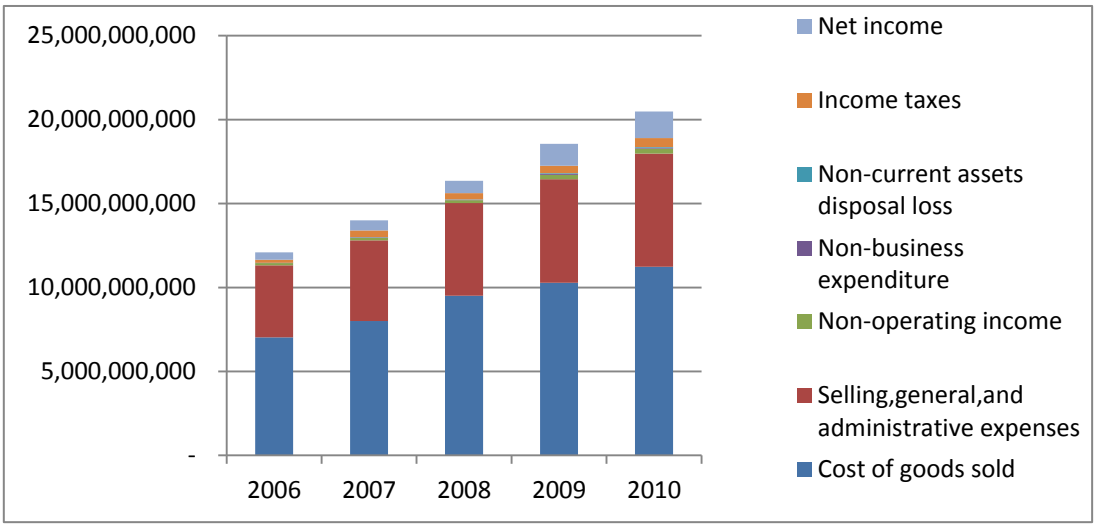
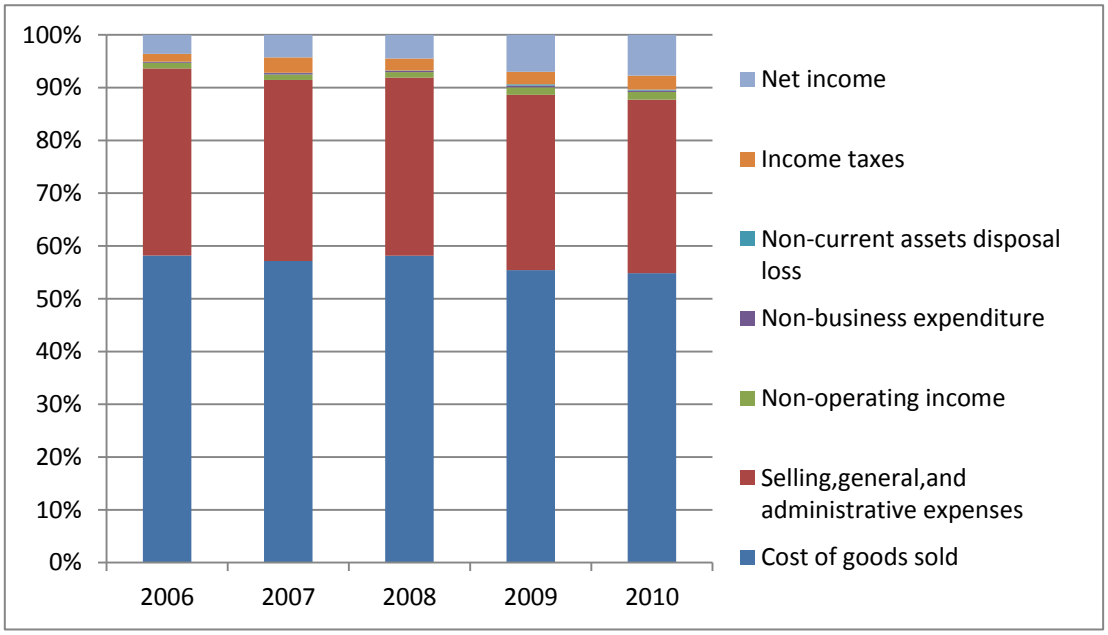


Chart 4.2 Common-size Analysis of Income Statement



In Chart 4.1, almost all the items have increased continually from 2006 to 2010. And we can get to know the common-size analysis of income statement by Chart 4.2, in which each item has been scaled relative to revenues. It's clear to see the proportions of each item of income and expenses have changed in the 5 years. We can easy find that the cost of goods sold has decreased over time as a percentage of revenues except in the year of 2008, but most other expenses have declined at the same year. And because of the other item of expenses

have changed very little, the proportion of net income to sales has increased from 2006 to 2010. It means the company's profitability has enhanced.

As the same way we did in last case, we can get the common-size balance sheet accounts as follows.

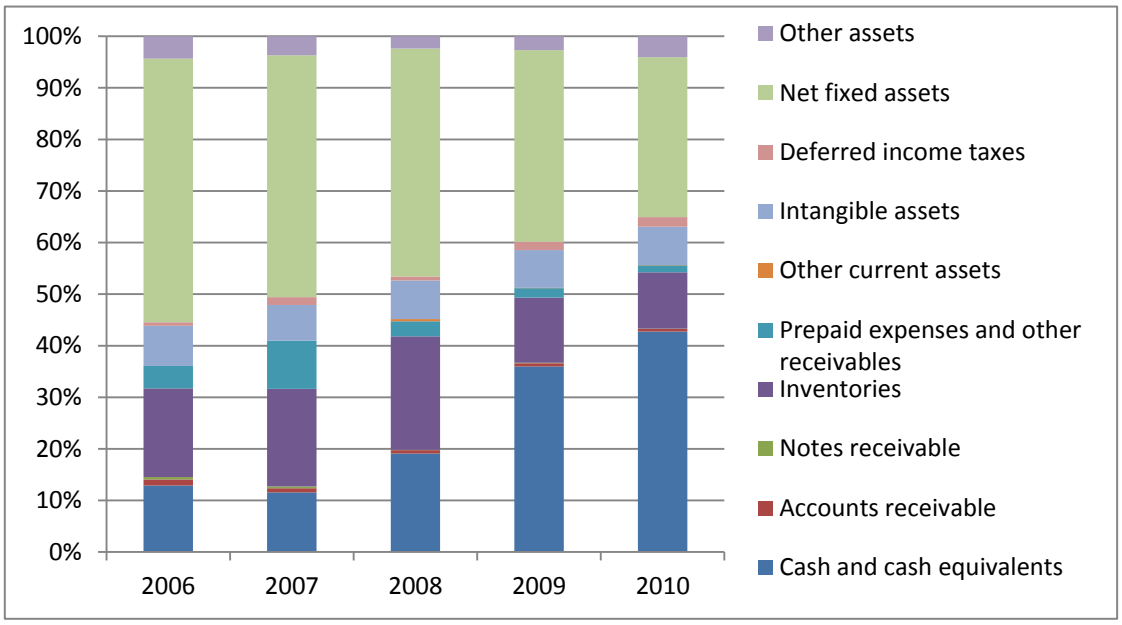
Table 4.2 Vertical Common-size Analysis of Assets

	2006	2007	2008	2009	2010
Cash and cash equivalents	12.89%	11.56%	19.10%	35.99%	42.74%
Accounts receivable	1.19%	0.82%	0.65%	0.62%	0.51%
Notes receivable	0.47%	0.32%	0.07%	0.07%	0.07%
Inventories	17.17%	18.95%	21.99%	12.63%	10.93%
Prepaid expenses and other receivables	4.35%	9.33%	2.92%	1.83%	1.34%
Other current assets	0.00%	0.00%	0.44%	0.07%	0.07%
Total current assets	36.07%	40.97%	45.17%	51.21%	55.66%
Intangible assets	7.80%	6.93%	7.48%	7.32%	7.42%
Deferred income taxes	0.67%	1.51%	0.76%	1.62%	1.87%
Net fixed assets	51.12%	46.90%	44.21%	37.16%	31.00%
Other assets	4.34%	3.68%	2.38%	2.69%	4.05%
Total assets	100.00%	100.00%	100.00%	100.00%	100.00%

The total current assets have increased from 36.07 percentages of total assets in 2006 to 55.66 percentages of total assets in 2010. On the other hand, the net fixed assets have decreased by 20.12 percent points during the five years.

And then we can make a chart to understand the company's asset structure more intuitive.

Chart 4.3 Common-size Analysis of Assets



Using Table 4.2 and Chart 4.3, we can know how the company's assets have changed in proportion over time: the net fixed assets have decreased from 51.12% to 31.00% relative to total assets in these five years; intangible assets didn't changed so much in each year; prepaid expenses and other receivables only has increased in 2007; inventories have increased before 2008, then it has decreased; cash and cash equivalents have decreased in 2007, then it has occupied more and more proportion of total assets which has taken 42.74% of total assets in 2010.

We can see the current assets of this company have gradually occupied a major part of total assets which has increased form 36.07% to 55.66% during these five years. This is mainly because of the high growth rate of cash: from the year of 2007, this Company has taken more and more cash as its assets.

Then we will use the same method to restate liabilities and equity, to have a look at patterns and changes of Qingdao Beer Company's capital structure.

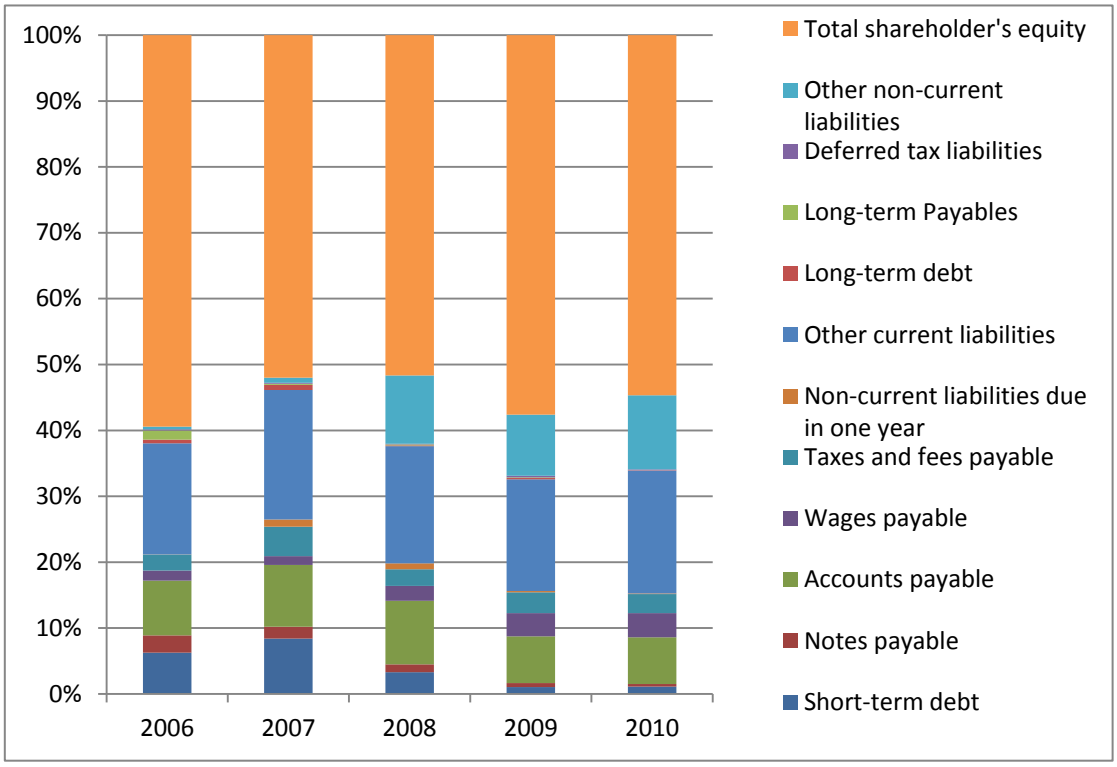
Table 4.3 Vertical Common-size Analysis of Liabilities and Shareholders' Equity

	2006	2007	2008	2009	2010
Short-term debt	6.27%	8.41%	3.31%	1.03%	1.10%
Notes payable	2.62%	1.80%	1.17%	0.60%	0.40%
Accounts payable	8.31%	9.36%	9.64%	7.12%	7.10%
Wages payable	1.52%	1.34%	2.27%	3.53%	3.65%
Taxes and fees payable	2.43%	4.47%	2.53%	3.14%	2.89%
Non-current liabilities due in one year	0.02%	1.09%	0.90%	0.19%	0.10%
Other current liabilities	16.86%	19.66%	17.78%	16.98%	18.59%
Total current liabilities	38.03%	46.13%	37.61%	32.58%	33.84%
Long-term debt	0.56%	0.79%	0.13%	0.19%	0.06%
Long-term payables	1.39%	0.16%	0.13%	0.10%	0.01%
Deferred tax liabilities	0.18%	0.15%	0.10%	0.23%	0.17%
Other non-current liabilities	0.41%	0.78%	10.36%	9.30%	11.24%
Total liabilities	40.58%	48.00%	48.33%	42.40%	45.32%
Total shareholders' equity	59.42%	52.00%	51.67%	57.60%	54.68%
Total liabilities and shareholders' equity	100.00%	100.00%	100.00%	100.00%	100.00%

Here we can notice the total current liabilities have decreased relative to total liabilities and shareholders' equity during the year of 2007 to 2009. The short-term debt has increased from 6.27% to 8.41% relative to total liabilities and shareholders' equity from 2006 to 2007, but this number in 2008 has decreased to 3.31%, and in the next two years, it only taken nearly 1% of total liabilities and shareholders' equity. Notes payable has decreased from 2.62% in 2006 to 0.40% in 2010. Accounts payable has increased in the first three years to get the high point 9.64% in 2008, and it has fallen down in the next two years. The wages payable only decreased in 2007 relative to total liabilities and shareholders' equity. Both of taxes and fees payable and other current liabilities have increased in 2007 and 2009.

And in the year of 2007 and 2008, as the reason of the total liabilities have increased a lot, the total shareholders' equity has taken a relative smaller part in total liabilities and shareholders' equity than other years.

Chart 4.4 Common-size Analysis of Liabilities and Shareholders' Equity



In Chart 4.4, the total shareholders' equity takes more than 50% of the company's total capital, even if it has changed fluctuated in the 2006-2010. Another important part is account payable, which has increased in the first three years, but it has fallen down slowly after 2008. The value of other current liabilities (taxes and fees payable, other payables and so on) has changed ranges from 16.86% and 19.66%. As the other non-current liability, it was only taken less than 1 percent of total liabilities and shareholders' equity in 2006 and 2007, but it has increased to around 10% from 2008 to 2010.

In general, the total shareholders' equity has taken a bigger part than total liabilities in this Company.

4.1.2 Horizontal Common-size Analysis

In horizontal common-size analysis, we will use 2006 as the base year, and then restate the next four years relative to 2006. Results are presented in the Table 4.4:

Table 4.4 Horizontal Common-size Analysis of Income Statement

	2006	2007	2008	2009	2010
Revenues	100.00%	115.86%	135.42%	152.34%	168.16%
Cost of goods sold	100.00%	113.74%	135.17%	146.20%	159.70%
Gross profit	100.00%	118.96%	135.77%	161.34%	180.56%
Selling, general, and administrative expenses	100.00%	111.97%	128.80%	143.67%	157.12%
Operating income	100.00%	177.70%	194.41%	309.93%	377.70%
Non-operating income	100.00%	111.23%	127.74%	202.73%	225.99%
Non-business expenses	100.00%	208.60%	205.24%	363.13%	333.19%
Non-current assets disposal loss	100.00%	164.52%	215.57%	648.96%	604.79%
Earnings before taxes	100.00%	162.94%	179.81%	282.25%	344.54%
Income tax	100.00%	226.86%	209.10%	245.91%	300.97%
Net income	100.00%	136.77%	167.82%	297.12%	362.38%

In table 4.4, we can see the revenues has increased by 68.16% in five years, but the net income in 2010 has been more than three times as it's in 2006, this shows the company has been more efficient to get profit from its sales. The cost of goods sold has increased a little slower than revenues, it's the same situation with the selling, general, and administrative expense. Even if the non-business expenses and non-current assets disposal loss have increased so much, but these only take a small part of total cost which we can see clearly in Table 4.1, so the net income has not influenced by these too much. As the earnings before taxes has increased by 244.54 percent in these five years which has increased slower than net income, it means the company has a better tax effect in the during years.

Table 4.5 Horizontal Common-size Analysis of Assets

	2006	2007	2008	2009	2010
Cash and cash equivalents	100.00%	108.29%	194.16%	434.03%	616.33%
Accounts receivable	100.00%	83.09%	71.85%	81.67%	79.22%
Notes receivable	100.00%	82.91%	20.13%	23.90%	28.02%
Inventories	100.00%	133.26%	167.93%	114.38%	118.34%
Prepaid expenses and other receivables	100.00%	258.96%	87.93%	65.53%	57.41%
Total current assets	100.00%	137.18%	164.18%	220.80%	286.95%
Intangible assets	100.00%	107.26%	125.63%	145.83%	176.73%
Deferred income taxes	100.00%	272.93%	148.23%	376.08%	518.72%
Net fixed assets	100.00%	110.80%	113.37%	113.04%	112.77%
Other assets	100.00%	102.34%	71.83%	96.38%	173.54%
Total assets	100.00%	120.76%	131.08%	155.51%	185.94%

The results of Qingdao Beer Company's common-size analysis of assets from 2006 to 2010 are shown in table 4.5. We can see the cash and cash equivalents have grown very fast in each year, and because of the high growth rate of cash and cash equivalents, the company's current assets has increased faster than the total assets. The account receivable in 2007-2010 has declined to around 80% of it was in 2006. Notes receivable and prepaid expenses and other receivables also have decreased a lot in these five years. The deferred income taxes has grown very fast except the year of 2008, but it still only taken a very small part of total assets which we can see it clearly in Table 4.2.The net fixed assets have increased about 10 percent in 2007, but it almost kept at the same level in the next three years. Finally, the total assets have enhanced by 85.94% in these five years.

Table 4.6 Horizontal Common-size Analysis of Total Liabilities and Shareholders' Equity

	2006	2007	2008	2009	2010
Short-term debt	100.00%	161.92%	69.18%	25.59%	32.72%
Notes payable	100.00%	82.87%	58.77%	35.91%	28.27%
Accounts payable	100.00%	136.01%	152.06%	133.12%	158.89%
Wages payable	100.00%	106.84%	196.27%	361.13%	447.11%
Taxes and fees payable	100.00%	222.27%	136.79%	201.09%	221.41%
Non-current liabilities due in one year	100.00%	5832.76%	5198.94%	1309.82%	828.68%
Other current liabilities	100.00%	140.78%	138.19%	156.54%	205.00%
Total current liabilities	100.00%	146.48%	129.62%	133.23%	165.44%
Long-term debt	100.00%	170.59%	29.79%	53.07%	20.13%
Long-term Payables	100.00%	13.65%	12.37%	10.65%	1.22%
Deferred tax liabilities	100.00%	98.05%	75.49%	197.31%	178.97%
Other non-current liabilities	100.00%	226.63%	3283.02%	3496.27%	5051.14%
Total liabilities	100.00%	142.86%	156.14%	162.51%	207.70%
Total shareholder's equity	100.00%	105.67%	113.97%	150.72%	171.08%
Total liabilities and shareholders' equity	100.00%	120.76%	131.08%	155.51%	185.94%

In Table 4.6, the total current liabilities have a slower growth than total liabilities relative to the base year of 2006 in most time. This is mainly because of the huge increase of other non-current liabilities. In current liability, the short-term debt and notes payable has decreased by around 70 percent in the five years. And as the reason of non-current liability due in one year only taken a very small part of total liabilities and shareholders' equity, so even the amount of it has increased or decreased very huge in each year, it still cannot given a big influence to total current liabilities. In non-current liabilities, the long-term debt and long-term payables have decreased so much relative to the year of 2006. The deferred tax liabilities have declined in 2007 and 2008, but it has increased to 197.31% in the year of 2009.

Compared the data of total liabilities with total liabilities and shareholders' equity, we can find the liabilities have occupied a more important position in this company as the reason of faster growth rate.

4.2 Financial Ratio Analysis

In the common-size analysis of Qingdao Beer Company, we can get a general understanding of this company's financial statement. Now, we need to have a deep analysis by using financial ratios. In this part, we will divide it into activity ratios, liquidity analysis, solvency analysis and profitability analysis.

4.2.1 Activity Ratios

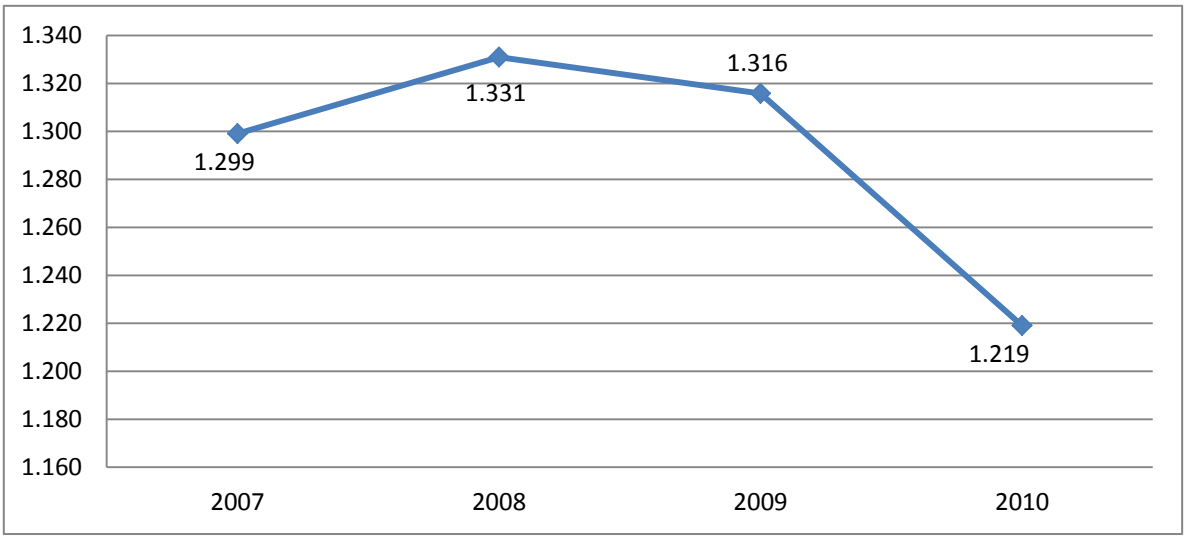
Table 4.7 Data used in Activity Ratios

	2006	2007	2008	2009	2010
Total revenue	11,832,800,000	13,709,200,000	16,023,400,000	18,026,100,000	19,897,800,000
Total assets	9,560,720,000	11,545,200,000	12,532,200,000	14,867,500,000	17,777,100,000
Receivables	113,372,000	94,199,300	81,452,700	92,594,600	89,810,100
cost of goods sold	7,034,760,000	8,001,650,000	9,509,010,000	10,285,100,000	11,234,500,000
Inventory	1,641,320,000	2,187,250,000	2,756,340,000	1,877,380,000	1,942,410,000
working capital	3,448,244,000	4,730,396,100	5,661,233,450	7,613,760,480	9,894,640,000
Accounts payable	794,675,000	1,080,800,000	1,208,380,000	1,057,840,000	1,262,630,000

A) Total assets turnover

Using the data of total revenue and total assets, we can calculate the ratio in the way of formula (2.1), the result is:

Chart 4.5 Total Assets Turnover



In Chart 4.5, the total assets turnover has increased by 0.032 between years 2007 and 2008, it shows Qingdao Beer Company's total assets could bring more revenues and the efficiency is higher. The company can get more profit from each unit of assets.

On the other way, after 2008 the total assets turnover has fallen down from year to year, especially in the year of 2010, it has decreased by 0.097. This phenomenon can be most because of the end of the 2008 Beijing Olympic Games: after Beijing Olympic Games, the growth rate of revenue has slowed down. The financial crisis could also have a negative impact on this.

Table 4.8 Growth Rate of Revenue and Total Assets

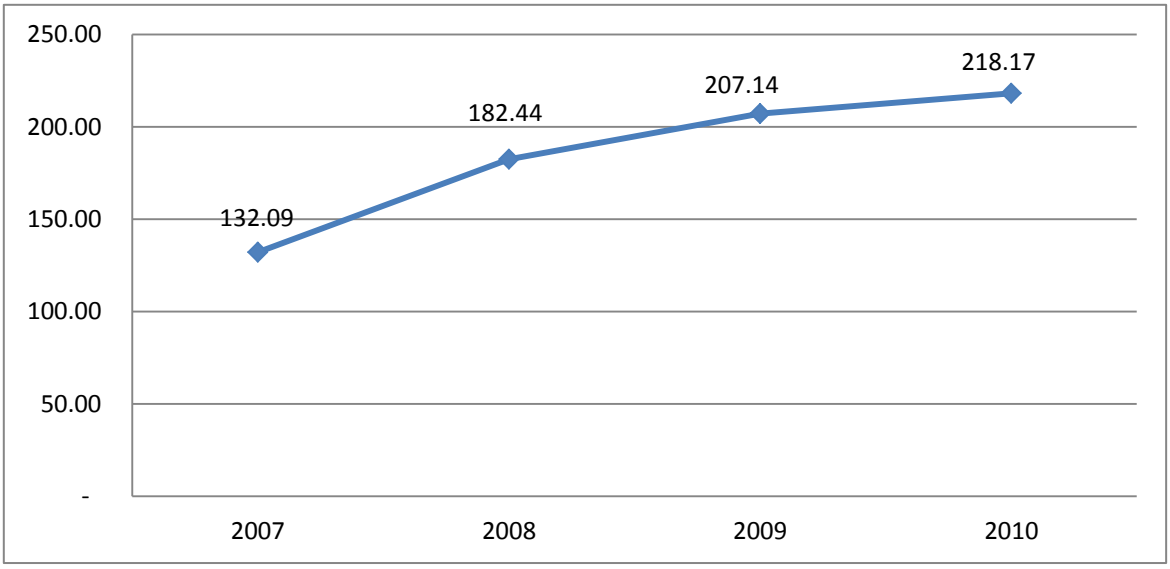
	2007	2008	2009	2010
Growth rate of revenue	15.86%	16.88%	12.50%	10.38%
Growth rate of total assets	20.76%	8.55%	18.63%	19.57%

Here we can see it clearly of that the growth rates of revenues were less than the growth rate of total assets after 2008, this led to the decline in total assets turnover from that year.

B) Receivables turnover

By using the data of total revenue and receivables, the receivable turnover can be calculated in the way of formula (2.2), and presented in the Chart 4.6

Chart 4.6 Receivable Turnover



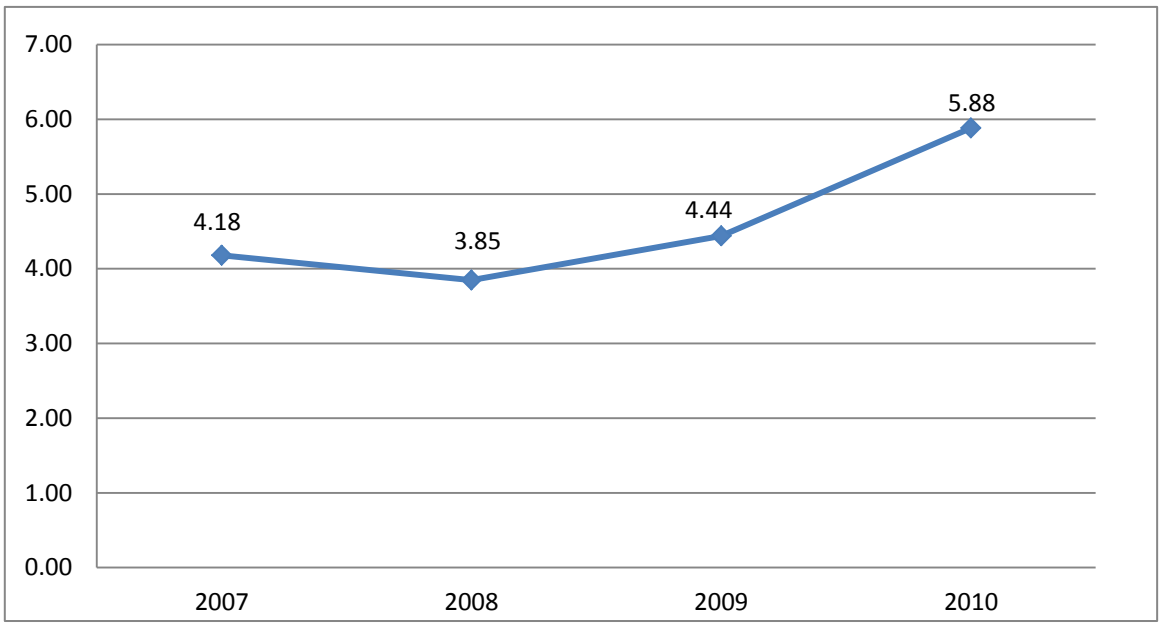
We can find in the Chart 4.6, that the receivable turnover was keep going up during 2007 to 2010. Because of the big decrease of receivables in 2008 as we can see in Table 4.7, the receivable turnover has increased fast in that year. But after 2008, the growth rate has a slight decrease, which can be result of the Beijing Olympic Games and the financial crisis.

From the increase trend of receivables turnover, we can conclude the company has a better operating capacity and faster recovery of receivables. The higher accounts receivable turnover ratio can effectively reduce collection costs and bad debt losses, benefit for current assets turn into cash, in this way Qingdao Beer Company has a strong short-term solvency.

C) Inventory turnover

To calculate inventory turnover, the items of cost of goods sold and inventory must be used. Then, calculating such data in the way of formula (2.3), we can get the inventory turnover as Chart 4.7

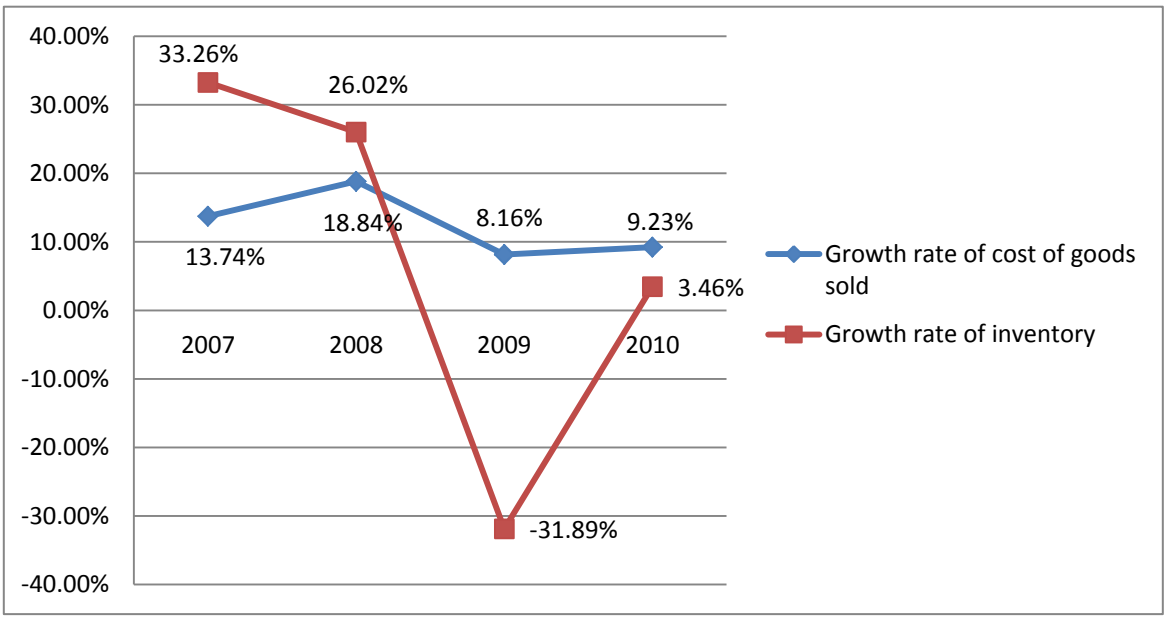
Chart 4.7 Inventory Turnover



From Chart 4.7, we can find the inventory turnover of Qingdao Beer Company has decreased in 2008, after that time, it went up quickly every year.

The evident reason of the inventory turnover of Qingdao Beer Company has decreased in 2008 is the Beijing Olympic Games. To prepare for the Olympic Games, Qingdao Beer Company purchased a large number of raw materials, and the price of raw materials was more expensive than in past years. Also the Wenchuan earthquake has influenced the price a lot.

Chart 4.8 Growth Rate of Cost of Goods Sold and Inventory



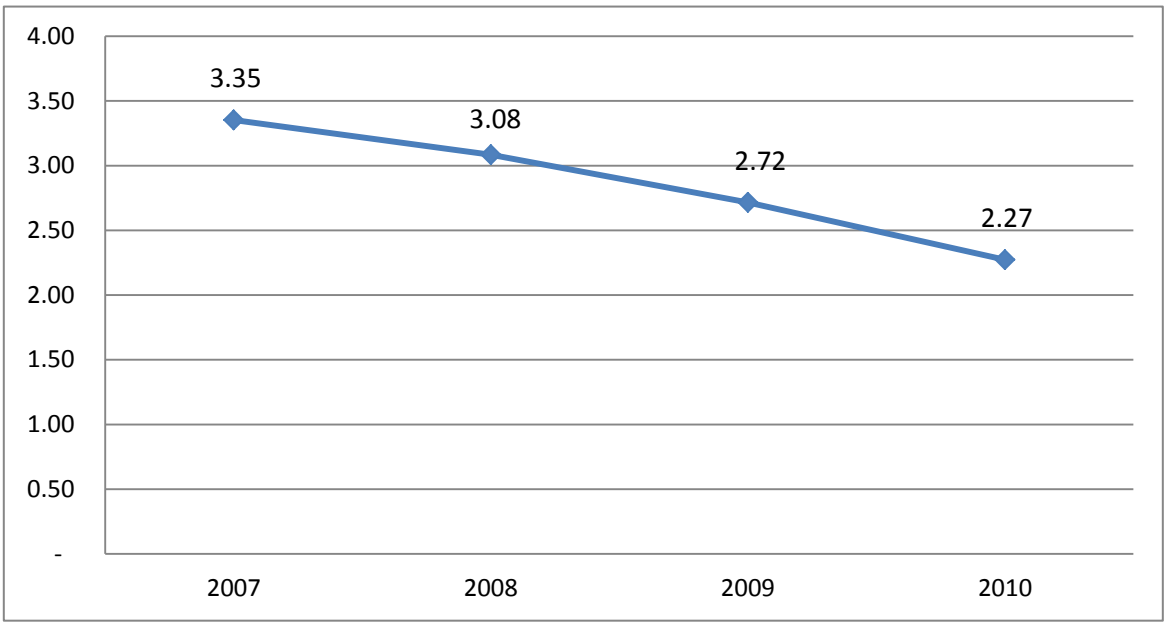
In Chart 4.8, we can see clearly that the growth rate of inventory was higher than the growth rate of cost of goods sold, this led to the decrease of inventory turnover in 2008. In 2009, the next year of Olympic Year, the inventories have fallen more than 20 percent, which was mainly due to the decrease of storage of main raw materials and the average cost of some main raw materials during this year. And in 2010, this ratio has gone back to a normal growth.

So, the Beijing Olympic Games has influenced the inventory turnover rate of Qingdao Beer Company a lot, but this is mainly due to the preparation of more inventories for this rare opportunity. After 2008, the company has gone back on track, the inventory turnover rate has kept growing up.

D) Working capital turnover

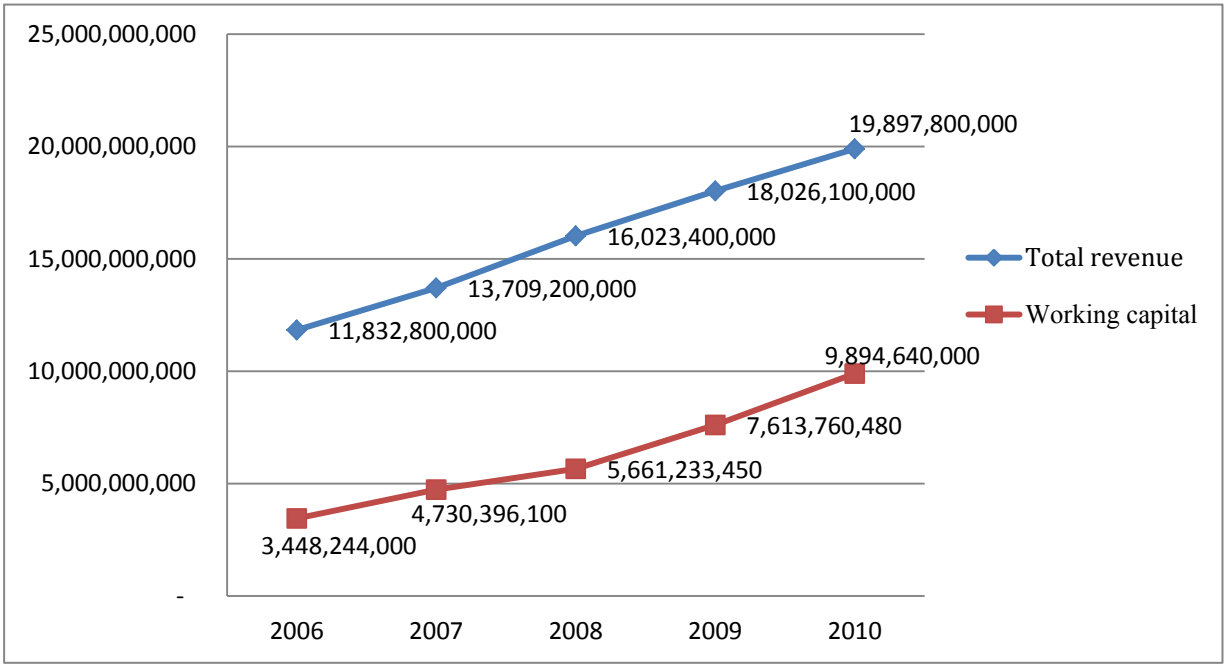
We can use the formula (2.4) to calculate the data of total revenue and working capital to get the working capital turnover.

Chart 4.9 Working Capital Turnover



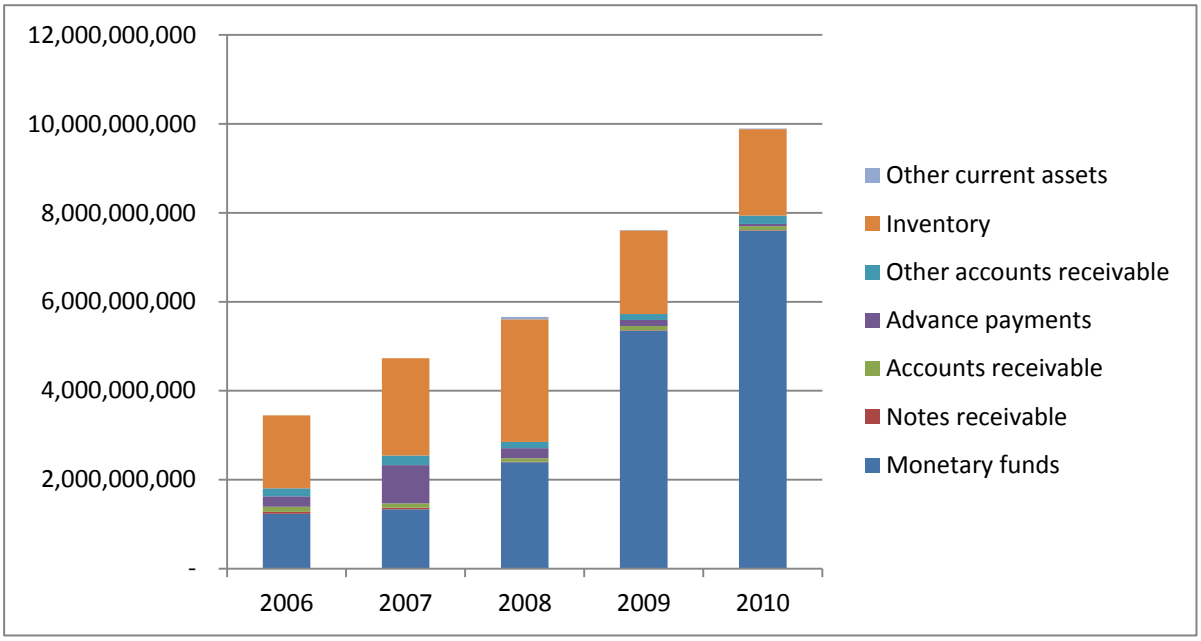
In Chart 4.9, the working capital turnover ratio has fallen down in these four years. This is a negative signal that implies the current assets have not been used efficaciously. And from Chart 4.10, we can find this phenomenon is due to the high growth rate of working capital. Because of the working capital has increased much faster than total revenue, the working capital turnover ratio has declined successively from 2007 to 2010.

Chart 4.10 Growth of Working Capital and Total Revenue



In order to find out why the working capital has increased so fast, we put all factors of working capital together to make a comparison.

Chart 4.11 Working Capital



As it shows in Chart 4.11, the prepaid has grown up by about 3 times between 2006 and 2007. After 2007, the cash were the most important factor to make the working capital increased so fast. Mainly because the net cash flow from operating activities, and the company trading convertible bonds to raise money.

So Qingdao Beer Company needs to take full advantage of its money cash, reduce the amount of currency. They should cut down cash opportunity costs and improve the efficiency of cash use.

E）Number of days of inventory

Using formula (2.5), we can get number of days of inventory as:

Table 4.9 Number of Days of Inventory

	2006	2007	2008	2009	2010
Number of days of inventory	85.16	99.77	105.80	66.62	63.11

Because of the inventories has increased so much in 2007 and 2008, the number of days of inventory has grown up by nearly 14 days in 2007 and 7 days in 2008. In 2009, it has declined by about 30 days, and it almost kept in the same level in 2010.

F) Number of days of receivables

We can get the number of days of receivables by calculating in the way of formula (2.6)

Table 4.10 Number of Days of Receivables

	2006	2007	2008	2009	2010
Number of days of receivables	3.50	2.51	1.86	1.87	1.65

As the reason of revenues have increased fast，and on the other hand the accounts receivable changed fluctuant around 90,000,000 after 2007. The number of days of receivables has decreased in these five years: due to the huge increase of revenues in 2007 and 2008, the number of days of receivables has decreased fast. Even though the revenues has kept a high growth rate in 2009, but the account receivables has also increased so much in the same year, so the number of days of receivables have only increased by 0.01 between the year of 2008 and 2009. In 2010, because of the increase of revenues and decrease of account receivables, the number of days of receivables has fallen down from 1.87 to 1.65.

And because of most of the trade in beer industry are in cash, so the accounts receivables only take a very small part of total assets. Thus the number of days of receivables was so small.

G) Number of days of payables and net operating cycle

Firstly, we need to use formula (2.8) to get the number of purchases.

Table 4.11 Purchases

	2007	2008	2009	2010
Purchases	8,547,580,000	10,078,100,000	9,406,140,000	11,299,530,000

In Table 4.11, we can find the purchases of this Company has increased continually during the four years

Next, we use data in Table 4.11 and Table 4.7 to calculate the number of days of payables, by the way of formula (2.7).

Table 4.12 Number of Days of Payables

	2007	2008	2009	2010
Number of days of payables	46.15	43.76	41.05	40.79

As what we can see in Table 4.12, the number of days of payables has decreased from 46.15 in 2007 to 40.79 in 2010. This can be thought of as the company has a better situation in its payment

Now, we already know the number of days of inventory, number of days of receivables and number of days of payables. We can next put them together to get the net operating cycle

Table 4.13 Net Operating Cycle

	2007	2008	2009	2010
Number of days of inventory	99.77	105.80	66.62	63.11
Number of days of receivables	2.51	1.86	1.87	1.65
Number of days of payables	46.15	43.76	41.05	40.79
Operating cycle	102.28	107.66	68.50	64.75
Net operating cycle	56.13	63.89	27.45	23.97

Here we can find that it has taken a shorter time for the company to get cash back from its investment in inventory and accounts receivable. The operating cycle has reduced in the four years, and the net operating cycle has fallen down from 56.13 to 23.97 in this period. So the company's liquidity has increased a lot.

4.2.2 Liquidity Analysis

A) Current ratio

Table 4.14 Current Ratio

	2006	2007	2008	2009	2010
Current assets	3,448,244,000	4,730,396,100	5,661,233,450	7,613,760,480	9,894,640,000
Current liabilities	3,636,318,710	5,326,310,000	4,713,278,000	4,844,535,700	6,015,780,000
Current ratio	0.95	0.89	1.20	1.57	1.64

In Table 4.14, the current ratio has declined by 6 percent points in 2007, this is mainly due to the company increased its debt to Qingdao Beer Yulin Company Limited, a Group's subsidiary under construction, for construction of factories in this year. So the current liabilities have increased so much. After 2007, the ratio has kept growing up from 0.89 to 1.64, it's mainly because of the company got more profit and had a more and more monetary reserves.

In total, the capacity to repay current liabilities has been stronger since 2008.

B) Quick ratio

Using formula (2.12) to calculate the data from balance sheet, we can get such numbers:

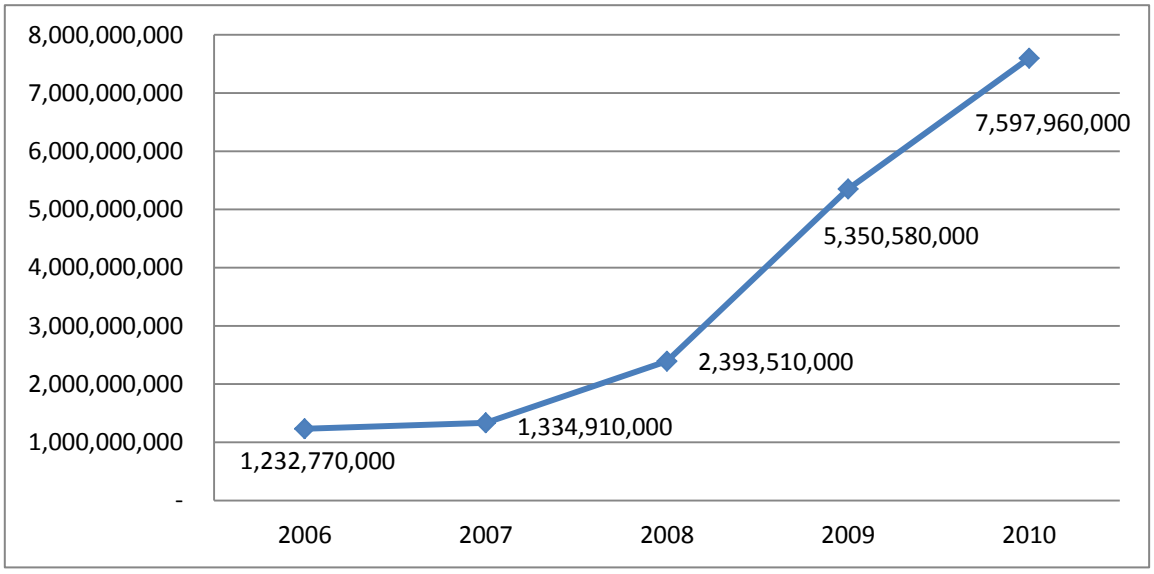
Table 4.15 Quick Ratio

	2006	2007	2008	2009	2010
Quick ratio	0.50	0.48	0.62	1.18	1.32

In Table 4.15, the quick ratio has fallen down by 2 percent points in 2007, this is mainly for the same reason as in the last case: for construction of new factories, the debt increased a lot.

After 2007, the quick ratio has increased very fast, we can find out the reason from Chart 4.9: the cash of this company kept a highly growth rate after 2007, which was mainly due to the net cash-flow from the business activities and the proceeds from the issuance of bonds with warrants. So, with the rapid growth of currency funds after 2007, the quick ratio has grown fast.

Chart 4.12 Cash



As a result, the Qingdao Beer Company's short-term debt-servicing ability has become stronger. On the other hand, with so much cash, the company would has a high opportunity cost on it.

4.2.3 Solvency Analysis

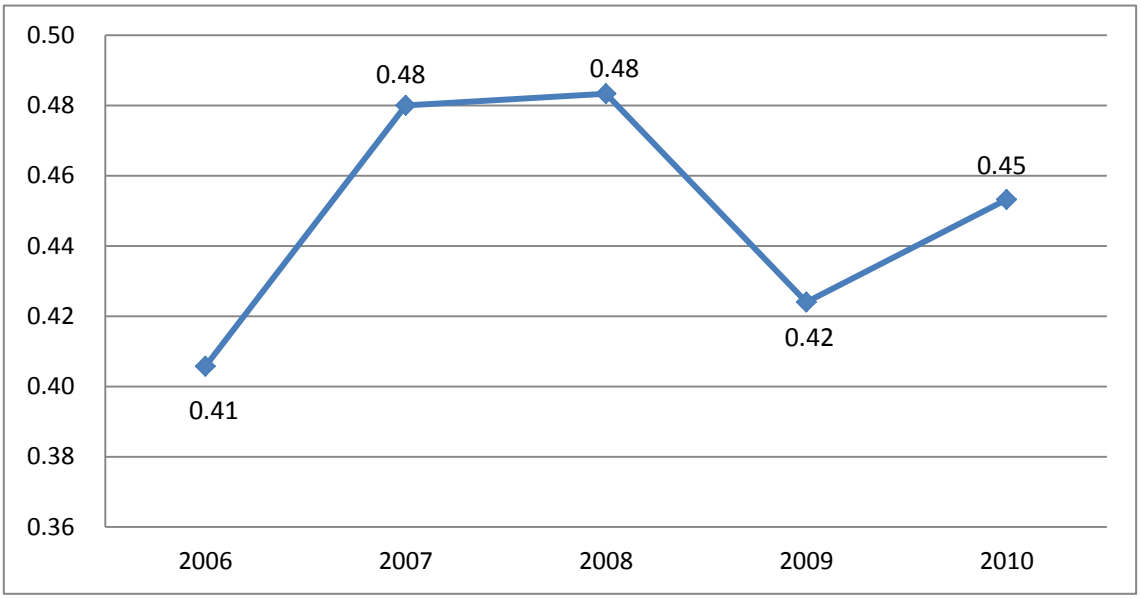
Table 4.16 Data used in Solvency Analysis

	2006	2007	2008	2009	2010
Total debt	3,879,365,870	5,541,985,300	6,057,416,300	6,304,296,100	8,057,375,610
Total assets	9,560,720,000	11,545,200,000	12,532,200,000	14,867,500,000	17,777,100,000
Long-term debt	53,259,300	90,854,400	15,868,200	28,266,900	10,722,100
Total shareholder's equity	5,681,354,130	6,003,214,700	6,474,783,700	8,563,203,900	9,719,724,390

A) Debt-to-assets ratio

Using formula (2.13) to get debt-to-assets ratio:

Chart 4.13 Debt-to-assets Ratio



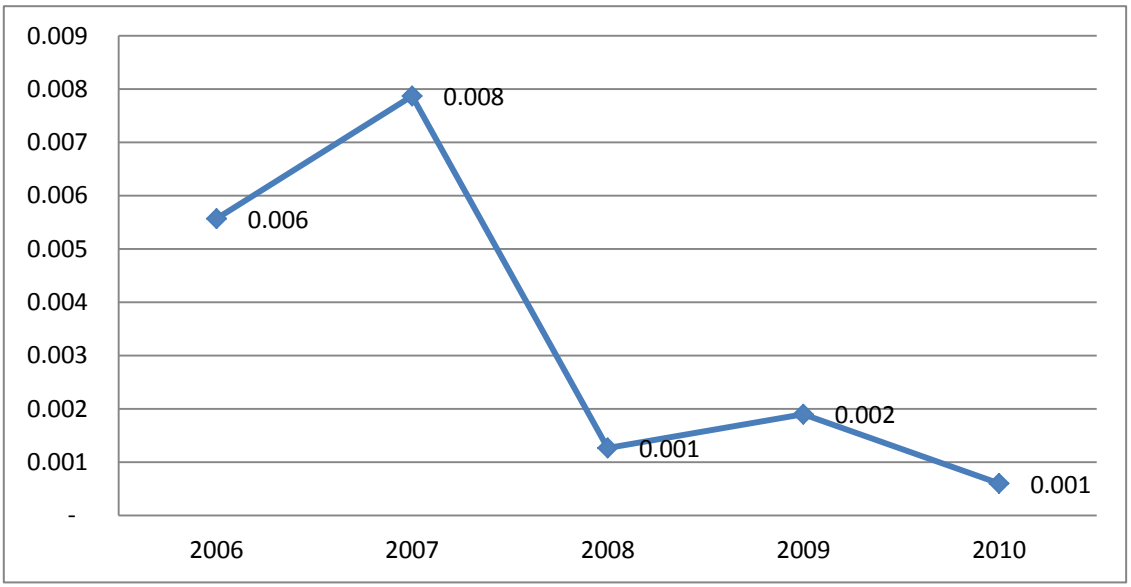
In Chart 4.13, the debt-to-assets ratio has grown up by about 7 percentage points in 2007, and it almost kept at the same level in 2008. This is mainly because in the year of 2007, the company has increased its debt to Qingdao Beer Yulin Company Limited, a Group's subsidiary under construction, for construction of factories. In the year of 2009, the ratio has fallen to 42.40%, this is due to the short-term borrowings has decreased so much during this year which we can find in the balance sheet. It was because of the repayment of some short-term borrowings by the company with own funds during the reporting period. Then, this ratio has returned back to 45.32% in 2010 as the reason of a big growth of non-current liabilities in this year, which was mainly due to the increase in deferred income recognized based on relocation progress as the relocation projects of certain subsidiaries progressed.

In generally, the debt-to-assets ratio has fluctuated between 40 percent and 50 percent during these four years, but as the company has increased or decreased its debt in different years, this ratio has been changed a little frequently.

B) Long-term debt-to-assets ratio

Using the formula (2.14) to get the long-term debt ratio:

Chart 4.14 Long-term Debt Ratio



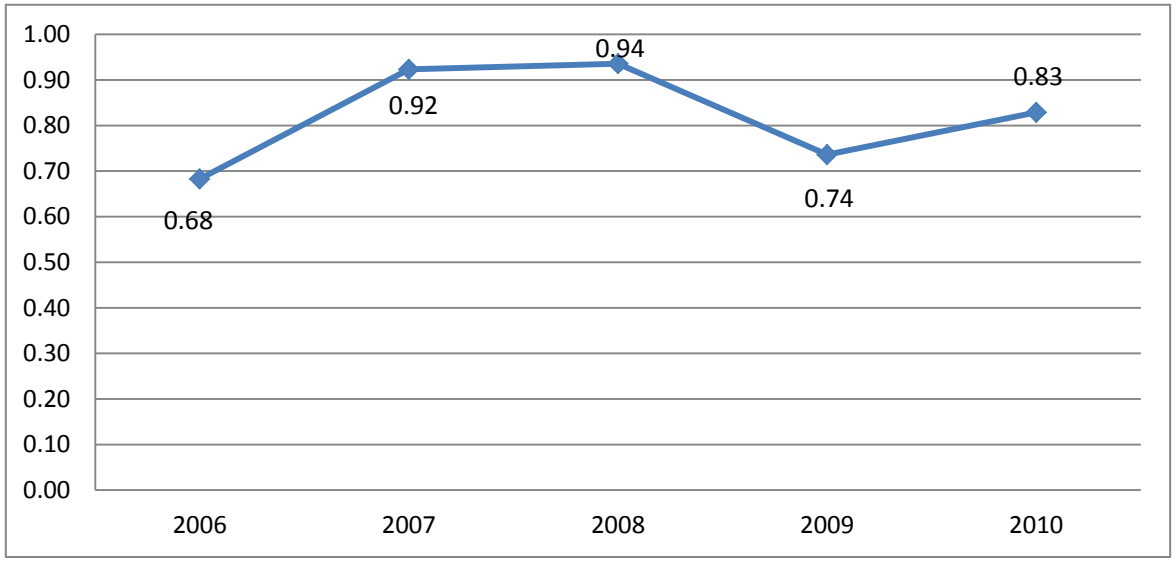
As it shows in Chart 4.14, the ratio is relative higher in 2006 and 2007, it's because of the company has increased their long-term debt to build new factories. In 2008, the ratio has declined to 0.1 percent point, this is due to the company cut their long-term debt a lot in this year. But in the next year of 2009, this ratio has increased again which was mainly because of the borrowings in Hong Kong dollars from Bank of Communications by the subsidiary in Hong Kong, that led the long-term borrowings of the year end has increased a lot from the year beginning. And as the reason of some subsidiaries repaid the borrowings during 2010, the long-term debt has decreased in a big proportion which led the ratio decreased again to 0.1 percent point.

All of this, the long-term debt was only taken a very small part in total assets.

C) Debt-to-equity ratio

Using formula (2.15) to calculate the data in Table 4.16.

Chart 4.15 Debt-to-equity Ratio



In Chart 4.15, we can find that the debt-to equity ratio has increased in most years because of the total debt grew faster than total shareholder's equity. But the ratio has decreased by 20 percentage points in 2009, which was because of a big growth of net income in this year led the total shareholder's equity increased so much.

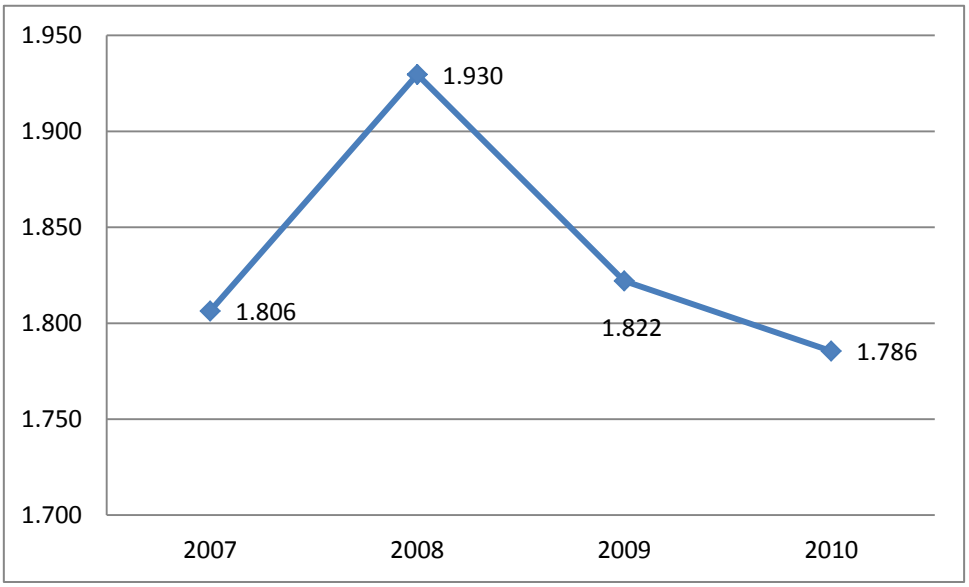
From the company's annual report, there are three reasons to explain the high speed growth of net income in 2009: the price of imported barley dropped back significantly and other raw materials continued to be kept at a low level; the percent of principal brand increased as it optimized the product and sales mix; the operating incomes increased as the sales volume increased with the satisfying growth trend of the sales of principal products.[7]

D) Financial leverage

Calculated the data of total assets and total shareholder's equity in the way of formula (2.16) to get the financial leverage:

[7] Extracted from the annual report of Qingdao Beer Co., LTD.(2009, p 49)

Chart 4.16 Financial Leverage



We can see it clearly that the financial leverage has increased by 10.24 percent points during 2007 to 2008, this was because of the company increased its debt so much in that year. And in the year of 2009, the ratio has declined by 10.8 percent points due to the total shareholder's equity has a big growth, the ratio also has decreased a little in the next year. In general, as the company has increased its debt relative to total assets from 2007 to 2008, so they could have a better tax effect. But after 2008, as the decrease of financial leverage, the company would have a heavier tax burden.

4.2.4 Profitability Analysis

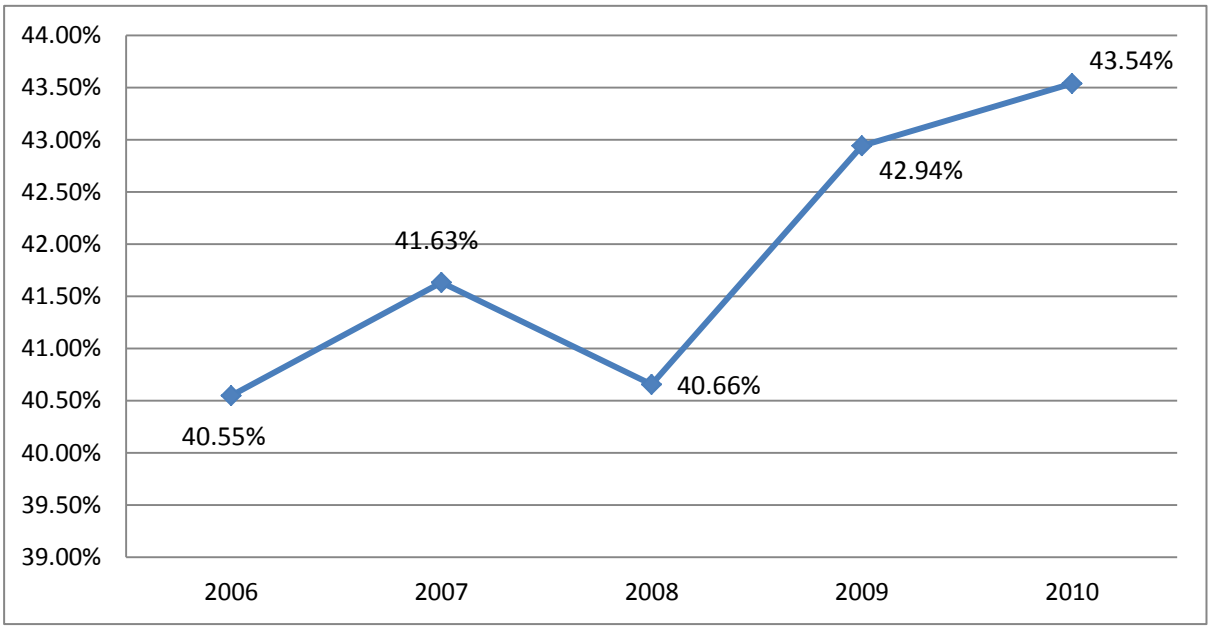
Table 4.17 Data used in Profitability Analysis

	2006	2007	2008	2009	2010
Gross profit	4,798,040,000	5,707,550,000	6,514,390,000	7,741,000,000	8,663,300,000
Total revenue	11,832,800,000	13,709,200,000	16,023,400,000	18,026,100,000	19,897,800,000
Operating income	509,937,300	906,140,490	991,370,800	1,580,443,700	1,926,027,680
Net income	437,232,000	598,001,000	733,772,000	1,299,110,000	1,584,420,000
Earnings before taxes	616,247,000	1,004,120,000	1,108,090,000	1,739,330,000	2,123,200,000
Total assets	9,560,720,000	11,545,200,000	12,532,200,000	14,867,500,000	17,777,100,000
Shareholders' equity	5,681,354,130	6,003,214,700	6,474,783,700	8,563,203,900	9,719,724,390

A) Gross profit margin

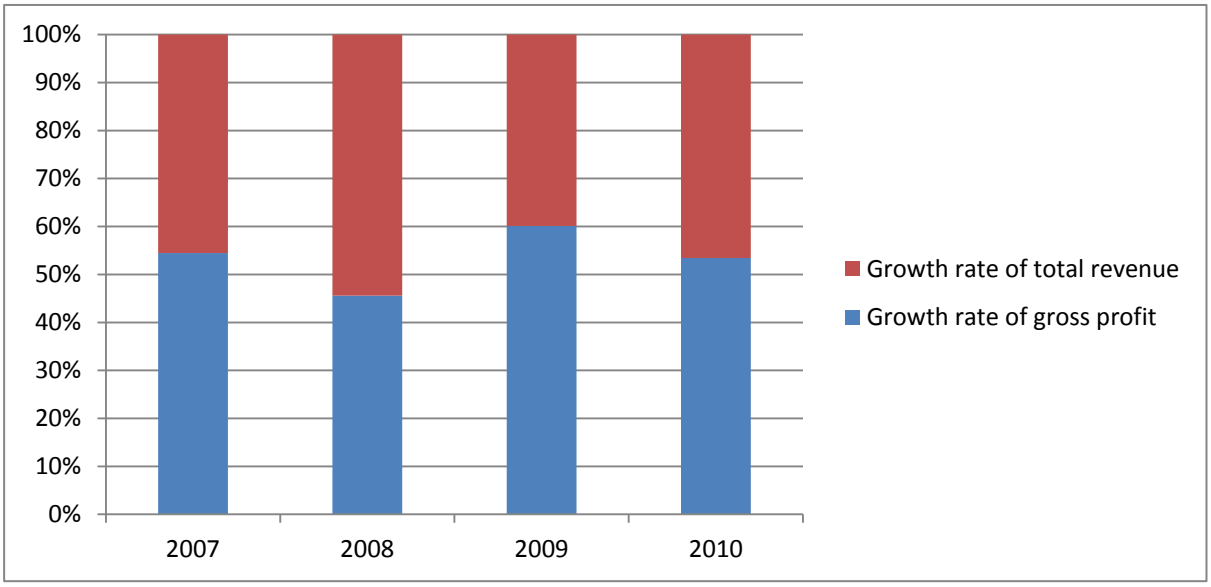
Using the formula (2.17), we can calculate the data in Table 4.17:

Chart 4.17 Gross Profit Margin



Based on Chart 4.17, we can find that the gross profit margin has increased in this period except 2008. And all these ratios are more than 40 percent. This means the company has a better and better profitability except the year of 2008

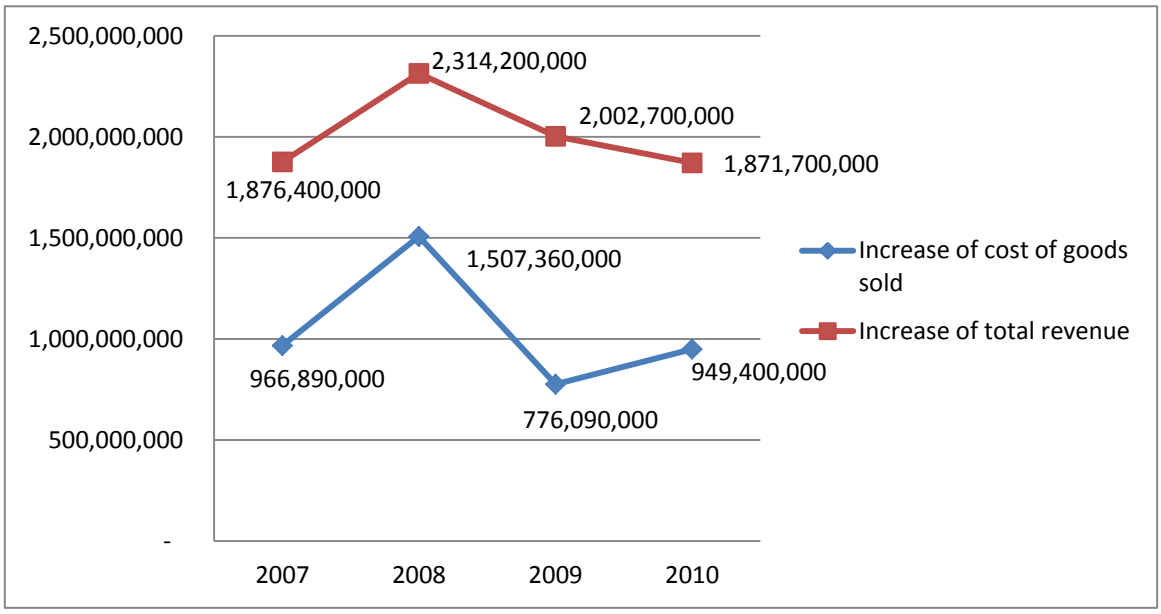
Chart 4.18 Growth Rate of Total Revenue and Gross Profit



In order to find out why the gross profit margin has declined in 2008, we can compare the growth rate of gross profit and the growth rate of total revenue from 2007 to 2010. In Chart

4.18, the growth rate of gross profit has slowed down in 2008, and it even less than the growth rate of total revenue. This can be mainly due to the price hike of main materials and packing materials which constituted the cost of beer.

Chart 4.19 Annual Changes of Total Revenue and Cost of Goods Sold



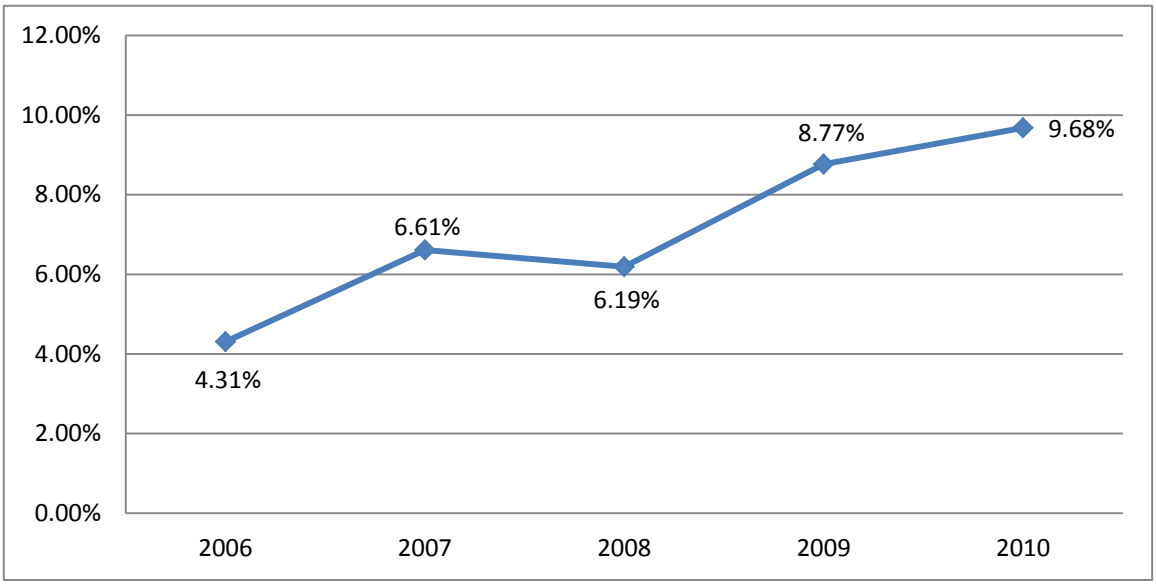
As what we can see in Chart 4.19, from 2006 to 2007 the increase of operating cost was ￥966,890,000 and in 2009 it was ￥776,090,000, but the number in 2008 was ￥1,507,306,000, this is almost sum of the two years. So, the Qingdao Beer Company has increased its operating cost by a wide margin in 2008, which lead to the growth of gross profit less than the growth of total revenue. As a result, the gross profit margin in 2008 was smaller than 2007.

So, in general, except the price of main materials increased a lot in 2008, the company has a better control of its costs of goods sold, they can get more profit in proportion of total revenue.

B) Operating profit margin

Using formula (2.18) to calculate the data in Table 4.17, we can get the operating income margin as:

Chart 4.20 Operating Income Margin



Here we can notice that only in 2008 the nunber has fallen down. This is the same reason as in last case: unusual increased of cost in Olympic Year that made operating income not grew enough to get such total revenue.

And from 2006 to 2010, this ratio has increased a lot from 4.31% to 9.68% which means this company can get more and more profit from its sales, the profitability of this company has became stronger.

C) Net profit margin

Using formula (2.19) to get the net profit margin as:

Table 4.18 Net Income Margin

	2006	2007	2008	2009	2010
Net income margin	3.70%	4.36%	4.58%	7.21%	7.96%

In this table, the net income margin of Qingdao Beer Company has an upward trend, and the growth rate has increased quickly. This is mainly due to the high increase rate of revenues: the total revenue has increased much more faster than the cost, so the company can get more net income in proportion of its total revenue. Even if the huge growth of cost in 2008 which led to the net income increased slowly, the whole trend of Qingdao Beer Company is very

good, the net income margin has increased twice times from 2006 to 2010. This company can get more net profit from each unit of its revenues.

D) Pretax profit margin

With the data in Table 4.17, we can use formula (2.20) to get pretax profit margin:

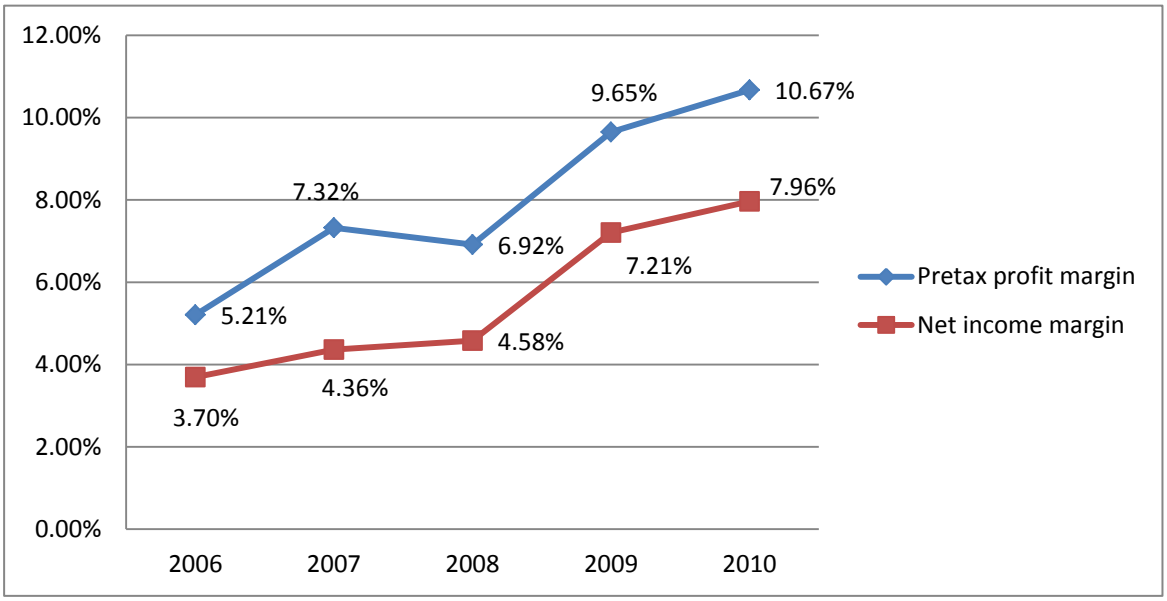
Table 4.19 Pretax Profit Margin

	2006	2007	2008	2009	2010
Pretax profit margin	5.21%	7.32%	6.92%	9.65%	10.67%

Here we can see the pretax profit margin has only decreased in the year of 2008, which due to the same reason we have said in the case of gross profit margin: the huge increased of cost in that year. Except the decrease in 2008, the whole development trend of pretax profit margin is very good, it has increased from 5.21% to 10.67% in five years.

Then, we can put the data in Table 4.18 and Table 4.19 together to compare the net income margin and pretax profit margin:

Chart 4.21 Net Income Margin and Pretax Profit Margin



In Chart 4.21, we can find that in 2006, the pretax profit margin has increased faster than the net income margin which means the company has got a heavy tax burden. During the year of 2007 to 2008, the profit margin has fallen down but the net income margin has grown up a

little. This is because the decreased of enterprise income tax let the company pay less taxes. After 2008, both of the pretax profit margin and net income margin has increased fast.

E) Operating return on assets

We can use formula (2.21) to get the operating return on assets:

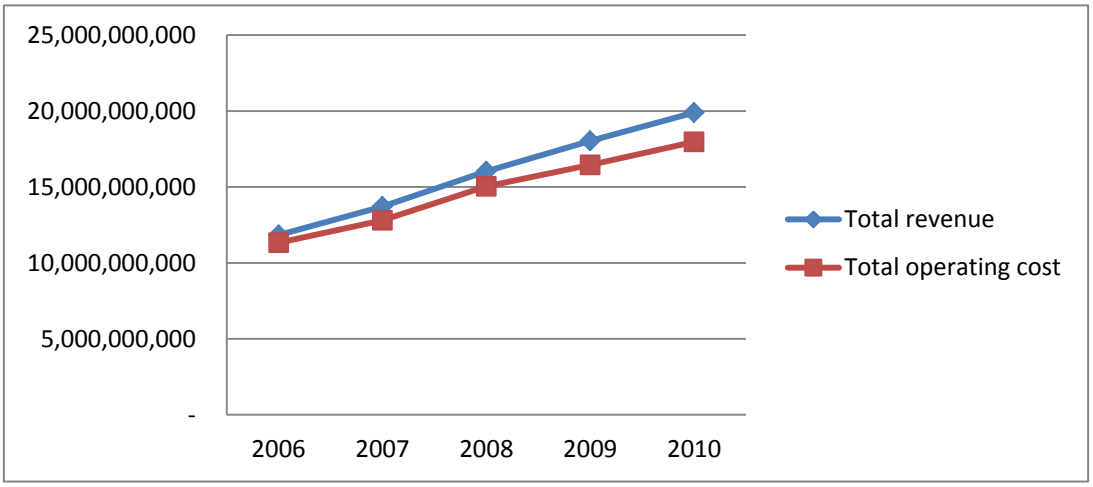
Table 4.20 Operating return on Assets

	2007	2008	2009	2010
Operating return on assets	8.59%	8.23%	11.54%	11.80%

Here we can see the operating return on assets has went down in 2008, but it has increased to more than 11 percent in next two years. From Table 4.17, we can find that the total assets kept a normal growth rate from 2006 to 2010, but the increase of operating income has changed a lot. The operating income has a huge increase in the year of 2009 which has grown from 991,370,800 to 1,580,443,700, this has directly led the operating return on assets increase by 3.31 percent points in that year. And in other years, the operating income did not rise too much, expacially in 2008, the growth rate of operating income even less than the growth rate of total assets, so the operating return on assets has decreased a little.

Because of the operating income is the result of revenue cut cost of goods sold and some operating cost, so we can have a deep understanding by comparing the total reveue and total operating cost.

Chart 4.22 Total Revenue and Total Operating Cost



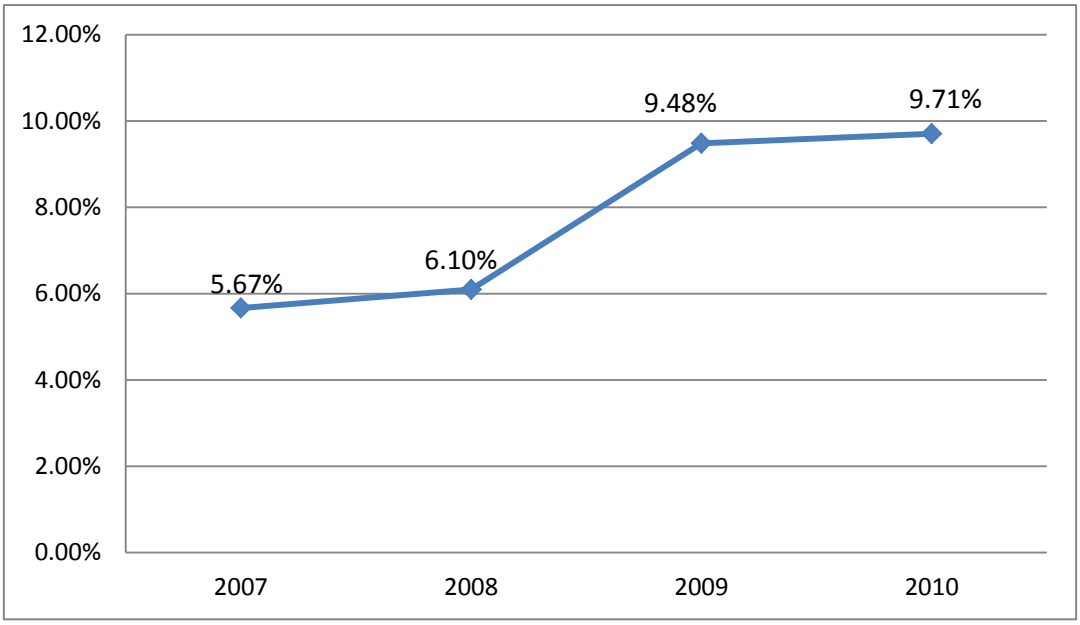
As what we see in Chart 4.22: the growth rate of total operating cost has fallen down in 2009 and 2010. This is because of in 2007 and 2008, the Qingdao Beer Company has prepared a large number of raw materials which have been more expencive than past years for the selling in Olympic Games. After 2008, the company has cut down its inventories and the raw materials' price return to a normal level. As a reason of this, the operating imcome has increased a lot in 2009 and the ratio of oprrating return on assets has also risen in a big number.

In general, the operating return on assets is going well, the company becomes more and more effectively.

F) Return on assets

With the data in Table 4.17 and formula (2.22), we can get the return on assets ratio of Qingdao Beer Company:

Chart 4.23 Return on Assets



In Chart 4.23, the return on assets ratio has kept growing from 5.67% to 9.71% in this period years, and it has increased markedly in 2009. From Table 4.17 we can find out that it's the huge growth of net income in 2009 led the return on assests increased too much in that year.

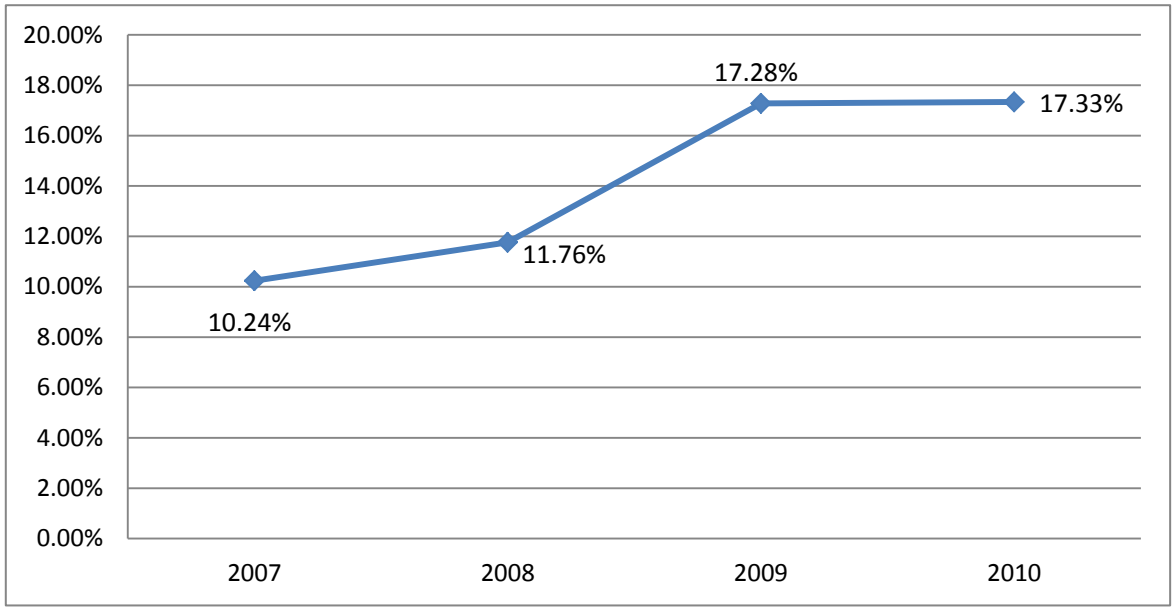
There are three main reasons to explain the big change of net income in 2009: 1) the revenues grew faster than sales, company's profuct structure was further optimized; 2) the company through technical innovation in order to process improvement and optimization of product structure optimization to reduce production costs; 3) the company has further enhanced brand value.

So, with the return on assets ratio increased continually, the investors can get more repayment from their investment.

G) Return on equity

We can use formula (2.23) to calculate the return on equity:

Chart 4.24 Return on Equity



From Chart 4.24, the ratio of return on equity has a great growth in 2009, and it has increased slowly in other years.

Then, we can go back to Table 4.17 to find out the reason of the increase of return on equity. In 2009, the Qingdao Beer Company has a notable growth of net income, but the shareholders' quity has grown only about 30 percent, as a result the return on equity has increased so much in that year. And from 2006 to 2010, the shareholder's equity changed relative gently, on the other hand, with the good work of this company: expanding market and

cut cost, the company can earn more profit year by year. So the return on equity has been increasing, this means the shareholders can earn more money from their stocks.

In general, the profitability of this company has been enhanced a lot during the year of 2006 to 2010, even if the increase of cost in 2008 has given a big negtive influence to this, the general development trends was very good.

4.3 DuPont Analysis

We had calculated lots of ratios of Qingdao Beer Company, now we can use DuPont analysis to get a whole study of these.

We can have a better understanding of a company's returns over time by using DuPont analysis. In this part, we will firstly get the ROA which is short of return on assets, this ratio can be divided into total assets turnover and net profit margin, than we can have a further step to look at the net profit margin which include tax effect, effect of nonoperating iterms and operating profit margin. After we discuse all of this, we will put the ROA and financial leverage together which is known as ROE, the short of return on equity.

Table 4.21 DuPont Analysis

			2007	2008	2009	2010
Tax effect	$1-\frac{\text{Taxes}}{\text{Income befor taxes}}$	(1)	0.5955	0.6622	0.7469	0.7462
Effect of nonoperating iterms	$\frac{\text{Income before taxes}}{\text{Operating income}}$	(2)	1.1081	1.1177	1.1005	1.1024
Operating profit margin	$\frac{\text{Operating income}}{\text{Revenues}}$	(3)	0.0661	0.0619	0.0877	0.0968
Net profit margin	$\frac{\text{Net income}}{\text{Revenues}}$	(4)=(1)×(2)×(3)	0.0436	0.0458	0.0721	0.0796
Total assets turnover	$\frac{\text{Revenues}}{\text{Average total assets}}$	(5)	1.2991	1.3310	1.3158	1.2191
Return on assets	$\frac{\text{Net income}}{\text{Aeverage total assets}}$	(6)=(4)×(5)	5.67%	6.10%	9.48%	9.71%
Financial leverage	$\frac{\text{Average total assets}}{\text{Average total shareholders}'\text{ equity}}$	(7)	1.8063	1.9296	1.8220	1.7855
Return on equity	$\frac{\text{Net income}}{\text{Average shareholders}'\text{ equity}}$	(8)=(6)×(7)	10.24%	11.76%	17.28%	17.33%

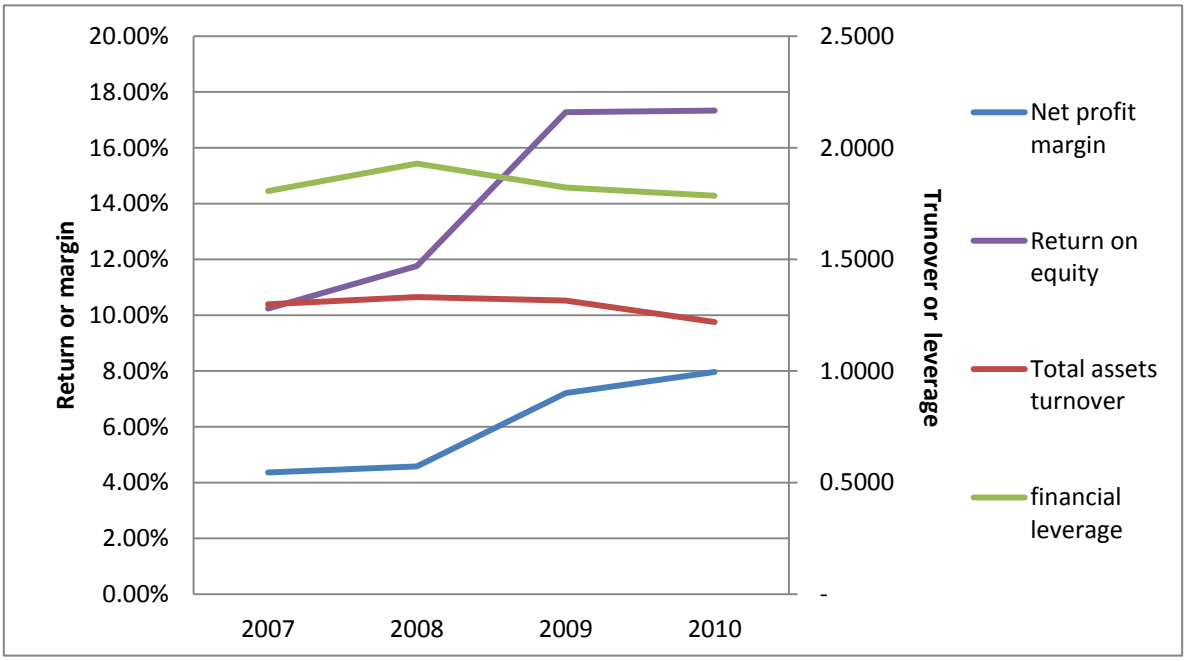
From Table 4.21, we can find that the return on assets has increased continually during the period of 2007 to 2010, especially in the year of 2009 it has grown by 3.38 percentage points. After we compared the net profit margin and total assets turnover, we can know the increase of return on assets in 2007 and 2008 was mainly because of the growth of total assets turnover which has increased by 3.19 percent points, it means this company can get more revenues by using its total assets in each units. After 2008, the growth of return on assets was mainly due to the increase of net profit margin. During this time, even if the total assets turnover has decreased from 1.3310 to 1.2191, but the net profit margin has increased a lot from 0.0458 to 0.0796. As a relative high growth rate of net profit margin, the return on assets has still increased during the year 2008 to 2010.

Then, we can focus on the net profit margin. As the decrease of cost during the year 2009 and 2010, the operating income margin has grown very fast, it has increased more than 2 percent points in each of the two years. The ratio of tax effect has increased before the year of 2010, but it has decreased a little in 2010 and gived a negative impact on the net profit marign. For the ratio of effect on nonoperating items, it almost kept at a stable level during these four years, but it has decreased a little in 2009 as the reason of financial crisis. All of this, the growth of net profit margin during the year of 2007 to 2008 was because of the increase of tax effect and effect on nonoprating items. And after 2008, as a better profitability of this company, the operating profit margin has increased fast and it was the major reason that cause a rose in the net profit margin

Now we can get a deeper understanding from the change of ROA during the period of 2007 to 2010: the company could get more net income from its average total assets was mainly because of the increase of net profit margin. And after 2008, due to a better profitability on operating profit, the operating profit margin of this company has increased fast, it was the mainly motive power to lead the growth of net profit margin.

Then, we can put the financial leverage which is the ratio of average total assets to average total shareholders' equity together with ROA to get the ROE. By using the ratio of ROE, we can identify the return of this company generates on its equity capital.

Chart 4.25 Return on Equity



As what we see in Chart 4.25, the return on equity has increased very fast before 2009, and it only has a small growth in the past year.

In 2008, the financial leverage, total assets turnover and net profit margin have increased which led to the growth of return on equity. But after 2008, the financial leverage and total assets turnover have declined, it was the high growrh rate of net profit margin that mad the return on equity increased in the two years. It shows the company can get more profit from their revenues, but it was harder for them to use assets to make revenues. On the other hand, as the decrese of financial leverage, the company has reduced its debt as a proportion of total assets. This means the financial risk of the company has reduced but they would pay more cost for it.

Now we can know that the return on equity of this company has increased during this four years, which is mainly due to the high growth rate of operating profit margin. It means the effect of operating profitablity of this company has been stronger. The tax effect and financial leverage have given a negtive influence to the growth of return on equity, the phenomenon is a signal to this company that they need to improve their assets stucture expecially and take more advantage used of debt.

4.4 Influence Quantification

After what we did in DuPont analysis, we can have a deeper study of the company's ROE by the method of formula (2.25) and formula (2.26). In this part, we also divide ROE into three main parts, and the EAT which is short of earnings after tax, it is the same meaning with net income.

First of all, we need calculate the absolute change of ROE and index of change of ROE by using the data in Table 4.21.

Table 4.22 Change of ROE

	2007	2008	2009	2010
ROE	10.24%	11.76%	17.28%	17.33%
Absolute change		1.53%	5.52%	0.05%
Index of the change		1.149	1.469	1.003

In order to find out which ratio contributed to the change of ROE at most, the method of gradual changes and logarithmic decomposition method will be uesd.

In this part: a_1 is net profit margin, a_2 is total assets turnover, a_3 is financial leverage.

2007 to 2008

Table 4.23 Method of Gradual Changes from 2007 to 2008

	a2007	a2008	Δa	Δx_{ai}	Order
a_1 = EAT/Revenue	0.0436	0.046	0.002	0.51%	2
a_2 = Revenue/Assets	1.299	1.331	0.032	0.26%	3
a_3 = Assets/Equity	1.806	1.930	0.123	0.75%	1
sum	x	x	x	1.53%	x

From Table 4.23, the net profit margin has increased by 0.2 percent points from the year 2007 to 2008, and the growth of total assets turnover and financial leverage which are a_2 and a_3, had increaed by 3.2 percent points and 12.3 percent points. As using formula (2.25), the method of gradual changes are shown in this table. Here we can see it clearly that the financial leverage has contributed most to the ROE changed, and the second influential

element is net profit margin which has contributed 0.51% in 1.53% of the sum annual changed, the total assets turnover has contributed 0.26% to annual ROE changed.

Table 4.24 Logarithmic Decomposition Method from 2007 to 2008

	a2007	a2008	I_a	Δx_{ai}	Order
a_1 = EAT/Revenue	0.044	0.046	1.050	0.53%	2
a_2 = Revenue/Assets	1.299	1.331	1.025	0.27%	3
a_3 = Assets/Equity	1.806	1.930	1.068	0.72%	1
sum	x	x	x	1.53%	x

In logarithmic decomposition method, we can find the same situation with last case: the financial leverage impact most to the change of ROE. Net profit margin and total assets turnover have contributed 0.53% and 0.27% to the sum increase of ROE.

2008 to 2009

Table 4.25 Method of Gradual Changes from 2008 to 2009

	a2008	a2009	Δa	Δx_{ai}	Order
a_1 = EAT/Revenue	0.046	0.072	0.026	6.75%	1
a_2 = Revenue/Assets	1.331	1.316	-0.015	-0.21%	3
a_3 = Assets/Equity	1.930	1.822	-0.108	-1.02%	2
sum	x	x	x	5.52%	x

As the high growth rate of net profit margin which has increased from 4.6 percent points in 2008 to 7.2 percent points in 2009, it has contributed most to the change of ROE. On the other hand, the total assets turnover and financial leverage have given a negative impact to the change of ROE. In total, the ROE has increased by 5.52% during this period.

Table 4.26 Logarithmic Decomposition Method from 2008 to 2009

	a2008	a2009	I_a	Δx_{ai}	Order
a_1 = EAT/Revenue	0.046	0.072	1.574	6.50%	1
a_2 = Revenue/Assets	1.331	1.316	0.989	-0.16%	3
a_3 = Assets/Equity	1.930	1.822	0.944	-0.82%	2
sum	x	x	x	5.52%	x

In Table 4.26, the net profit margin has contributed 6.50% to the sum change 5.52%, it was also the most important ratio to the change of ROE. And financial leverage was the second influential ratio while the total assets tunover was the least influential ratio.

2009 to 2010

Table 4.27 Method of Gradual Changes from 2009 to 2010

	a2009	a2010	Δa	Δx_{ai}	Order
a_1 = EAT/Revenue	0.0721	0.080	0.008	1.81%	1
a_2 = Revenue/Assets	1.316	1.219	-0.097	-1.40%	2
a_3 = Assets/Equity	1.822	1.786	-0.037	-0.35%	3
sum	x	x	x	0.05%	x

The net profit margin has increased by 0.8 percent points from 2009 to 2010, it has contributed 1.81% to the sum change of ROE. Even if the total assets turnover has decreased by 9.7 percent points, it still the second influencial factor. The financial leverage has contributed -0.35% to the sum change of ROE, and it has influenced the change of ROE least.

Table 4.28 Logarithmic Decomposition Method from 2009 to 2010

	a2009	a2010	I_a	Δx_{ai}	Order
a_1 = EAT/Revenue	0.072	0.080	1.105	1.73%	1
a_2 = Revenue/Assets	1.316	1.219	0.926	-1.32%	2
a_3 = Assets/Equity	1.822	1.786	0.980	-0.35%	3
sum	x	x	x	0.05%	x

The ROE has increased 0.05 percent points from 2009 to 2010, and the net profit margin has contributed 1.73 percent point to it. And the logarithmic method of total assets turnover and financial leverage were -1.32% and -0.35%

In general, from the year 2007 to 2008, the financial leverage was the most important ratio to contribute the growth of ROE. After 2008, the high growth rate of net profit margin was the most influential factor for ROE change.

5 Conclusion

Qingdao Beer Company is the biggest beer company in China which still extends their business to the whole world. From 2006 to 2010, the general development of this company was in a good condition, the revenues and net profit increased very fast. The company continues to expand the scale and enhanced the efficiency, their brand familiarities and influence has been improved.

In the common-size analysis we can know that the earnings before taxes and net income of this company have been increased relative to revenues. During the time of 2006 to 2010 the revenues has increased by 68.16%, and the net income has increased for more than three times in the same period, this shows this company has been more efficient to get profit from its sales. In the other part of common-size analysis of assets, the total current assets has increased by 186.95% in the five years which was mainly due to the huge growth rate of cash, the cash has increased for more than five times from 2006 to 2010. And the total assets of the company have enhanced by 85.94%. Then we can find the total liabilities has increased by 107.97% and total shareholders' equity has increased by 71.08%, it shows the liabilities have occupied a more important position in this company which was mainly because of the company has increased its debt for building new factories. In total, the company has expanded the scale and enhanced the efficiency. But on the other hand, the company kept large number of cash as its current assets would increase their opportunity costs.

In the financial ratio analysis, we had divided it into four parts. The first part is activity ratios which can be used to measure how well a company uses its assets, and help us to evaluate the benefits produced by specific assets. Here we can find the total assets turnover has decreased from the year of 2008, but the receivable turnover and inventory turnover have increased during 2006 to 2010. Also we can use the number of days as another way to study about the company's activity, after we calculated the number of days of inventory, number of days of receivables and number of days of payables, we can get the net operating cycle which show us it has declined from 56.13 to 23.97, so the company's activity has increased in this five years. The second part is liquidity analysis which can be used to measure the liquidity of

the company as on a particular day. We can find that the current ratio and quick ratio have the same development trends: both of them have decreased in 2007 and have increased from 2008 to 2010. This is because of the company increased its debt to Qingdao Beer Yulin Company Limited for construction of factories in 2007. As the two ratios have increased continually after 2008, the company has a stronger ability to meet its immediate or short-term liabilities and obligations. In the solvency analysis, the company has increased its debt in 2007 and 2008 a lot which due to they built new factories in that period. The last part is profitability analysis that can be used to measure the ability to generate profit from invested capital in the form of return during a period. Because of the huge growth of cost in 2008, the gross profit margin, operating profit margin, pre-tax profit margin and operating return on assets have a little decreased, but it has a stable increase in the other years, so in total, the company has a better and better profitability during the year of 2006 to 2010.

In the DuPont analysis, mainly because of the high growth rate of net profit margin which has increased from 0.0436 in 2007 to 0.0796 in 2010, the return on assets and return on equity have increased during these four years. But on the negative side, the financial leverage and total assets turnover have decreased in the year 2009 and 2010. In total, the company was in a good develop situation, the profitability was strengthened.

By using influence quantification analysis, we can get to know the most important factor to make ROE increased before 2008 was the financial leverage. And after the year of 2008, the net profit margin was the main ratio to contribute the change of ROE.

In the future, facing the situation of the inflation and the price rise of main raw materials, the company should strive to control the over-fast growth of the costs by taking the measures including further strengthening its price estimation and expanding centralized purchase, while the company should also expedite to launch new technologies to further save energy and reduce the consumption.

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List of Abbreviations

COGS	Cost of Goods Sold
ROA	Return on Assets
ROE	Return on Equity
OROA	Operating Return on Assets
EBIT	Earnings before Interest and Tax
EAT	Earnings after Tax

Declaration of Utilization of Results from a Bachelor Thesis

Herewith I declare that

- I am informed that Act No. 121/2000 Coll. – the Copyright Act, in particular, Section 35 – Utilization of the Work as a Part of Civil and Religious Ceremonies, as a Part of School Performances and the Utilization of a School Work – and Section 60 – School Work, fully applies to my diploma (bachelor) thesis;
- I take account of the VSB – Technical University of Ostrava (hereinafter as VSB-TUO) having the right to utilize the diploma (bachelor) thesis (under Section 35(3)) unprofitably and for own use ;
- I agree that the diploma (bachelor) thesis shall be archived in the electronic form in VSB-TUO's Central Library and one copy shall be kept by the supervisor of the diploma (bachelor) thesis. I agree that the bibliographic information about the diploma (bachelor) thesis shall be published in VSB-TUO's information system;
- It was agreed that, in case of VSB-TUO's interest, I shall enter into a license agreement with VSB-TUO, granting the authorization to utilize the work in the scope of Section 12(4) of the Copyright Act;
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List of Annexes

Annexes

Annex 1

Balance sheet

Period Ending	31/12/2006	31/12/2007	31/12/2008	31/12/2009	31/12/2010
Assets					
Current assets					
Monetary funds	1,232,770,000.00	1,334,910,000.00	2,393,510,000.00	5,350,580,000.00	7,597,960,000.00
Notes receivable	44,979,000.00	37,293,800.00	9,054,750.00	10,750,000.00	12,605,000.00
Accounts receivable	113,372,000.00	94,199,300.00	81,452,700.00	92,594,600.00	89,810,100.00
Advance payments	235,535,000.00	862,482,000.00	225,456,000.00	139,233,000.00	49,776,000.00
Other accounts receivable	180,268,000.00	214,261,000.00	140,144,500.00	133,244,000.00	188,917,000.00
Inventories	1,641,320,000.00	2,187,250,000.00	2,756,340,000.00	1,877,380,000.00	1,942,410,000.00
Other current assets	0	0	55,275,500.00	9,978,880.00	13,161,900.00
Total current assets	3,448,244,000.00	4,730,396,100.00	5,661,233,450.00	7,613,760,480.00	9,894,640,000.00
Non-current assets					
Long-term receivables	26,142,800.00	20,041,600.00	19,921,600.00	2,000,000.00	2,000,000.00
Long-term equity investments	25,765,800.00	33,551,200.00	34,365,700.00	152,818,000.00	153,017,000.00
Net fixed assets	4,887,100,000.00	5,414,840,000.00	5,540,380,000.00	5,524,560,000.00	5,511,050,000.00
Project under construction	233,290,000.00	225,381,000.00	108,207,000.00	99,271,100.00	282,566,000.00
Disposal of fixed assets	186,021.00	126,626.00	1,258,410.00	13,336,900.00	3,148,490.00
Intangible assets	746,209,000.00	800,353,000.00	937,458,000.00	1,088,230,000.00	1,318,790,000.00
Goodwill	122,816,000.00	122,816,000.00	122,816,000.00	122,816,000.00	122,816,000.00
Long-term prepaid expenses	6,925,880.00	8,393,730.00	7,247,780.00	9,814,080.00	7,906,290.00
Deferred income taxes	64,040,499.00	174,783,000.00	94,929,900.00	240,843,000.00	332,191,000.00
Other non-current assets	0	14,517,744.00	4,382,160.00	50440	148,975,220.00
Total non-current assets	6,112,476,000.00	6,814,803,900.00	6,870,966,550.00	7,253,739,520.00	7,882,460,000.00
Total assets	9,560,720,000.00	11,545,200,000.00	12,532,200,000.00	14,867,500,000.00	17,777,100,000.00

Period Ending	31/12/2006	31/12/2007	31/12/2008	31/12/2009	31/12/2010
Liabilities					
Current liabilities					
Short-term debt	599,745,000.00	971,096,000.00	414,907,000.00	153,472,000.00	196,217,000.00
Notes payable	250,117,000.00	207,268,000.00	146,983,000.00	89,828,100.00	70,711,200.00
Accounts payable	794,675,000.00	1,080,800,000.00	1,208,380,000.00	1,057,840,000.00	1,262,630,000.00
Advance payments	191,662,000.00	482,882,000.00	340,759,000.00	271,016,000.00	775,415,000.00
Wages payable	145,153,000.00	155,081,000.00	284,893,000.00	524,189,000.00	648,994,000.00
Taxes and fees payable	232,244,000.00	516,218,000.00	317,676,000.00	467,030,000.00	514,219,000.00
Dividends payable	0	0	0	0	9,549,730.00
Other Payables	1,420,559,000.00	1,786,761,000.00	1,887,190,000.00	2,252,820,000.00	2,520,113,770.00
Non-current liabilities due in one year	2,163,710.00	126,204,000.00	112,490,000.00	28,340,600.00	17,930,300.00
Total current liabilities	3,636,318,710.00	5,326,310,000.00	4,713,278,000.00	4,844,535,700.00	6,015,780,000.00
Non-current liabilities					
Long-term debt	53,259,300.00	90,854,400.00	15,868,200.00	28,266,900.00	10,722,100.00
Bonds payable	0	0	1,137,180,000.00	1,198,900,000.00	1,264,650,000.00
Long-term Payables	132,855,000.00	18,133,100.00	16,439,500.00	14,143,300.00	1,625,410.00
Payable for special	7,758,460.00	61,367,300.00	136,997,000.00	13,034,700.00	184,215,000.00
Deferred tax liabilities	17,374,400.00	17,034,900.00	13,116,600.00	34,281,500.00	31,094,100.00
Other non-current liabilities	31,800,000.00	28,285,600.00	24,537,000.00	171,134,000.00	549,289,000.00
Total non current liabilities	243,047,160.00	215,675,300.00	1,344,138,300.00	1,459,760,400.00	2,041,595,610.00
Total liabilities	3,879,365,870.00	5,541,985,300.00	6,057,416,300.00	6,304,296,100.00	8,057,375,610.00
Shareholders ' equity					
Paid-up capital (or share capital)	1,308,220,000.00	1,308,220,000.00	1,308,220,000.00	1,350,980,000.00	1,350,980,000.00
Capital reserve	2,854,810,000.00	2,864,570,000.00	3,025,720,000.00	4,194,820,000.00	4,016,840,000.00
Surplus reserve	476,721,000.00	495,219,000.00	536,108,000.00	613,542,000.00	691,826,000.00
Undistributed profits	583,710,000.00	835,546,000.00	1,206,400,000.00	2,055,210,000.00	3,537,820,000.00
Balance of foreign currency statement translation	4,736,920.00	5,635,300.00	5,791,670.00	6,031,790.00	5,643,470.00
Total shareholders ' equity of parent company	5,228,197,920.00	5,509,190,300.00	6,082,239,670.00	8,220,583,790.00	9,603,109,470.00
Minority interests	453,156,210.00	494,024,400.00	392,544,030.00	342,620,110.00	116,614,920.00
Total shareholder's equity	5,681,354,130.00	6,003,214,700.00	6,474,783,700.00	8,563,203,900.00	9,719,724,390.00
Total liabilities and shareholders ' equity (or equity)	9,560,720,000.00	11,545,200,000.00	12,532,200,000.00	14,867,500,000.00	17,777,100,000.00

Annex 2

Cash flows

Period Ending		31/12/2006	31/12/2007	31/12/2008	31/12/2009	31/12/2010
Cash flows from operating activities						
	Cash received from sales of goods and provision of services	13,791,700,000.00	15,561,700,000.00	17,986,600,000.00	20,409,100,000.00	22,865,100,000.00
	Receive tax return	64,618,000.00	67,672,100.00	70,265,200.00	116,759,000.00	105,671,000.00
	Cash receipts relating to other business activities	1,041,700,000.00	1,059,740,000.00	770,386,000.00	718,883,000.00	924,863,000.00
	Total cash flows from operating activities	14,898,018,000.00	16,689,112,100.00	18,827,251,200.00	21,244,742,000.00	23,895,634,000.00
	Cash purchases, receive services	8,282,490,000.00	9,566,260,000.00	10,129,900,000.00	10,086,900,000.00	11,804,200,000.00
	Cash payments to and on behalf of employees	852,958,000.00	1,127,310,000.00	1,538,040,000.00	1,750,040,000.00	1,972,360,000.00
	All tax payments	2,557,830,000.00	2,813,720,000.00	3,481,020,000.00	3,891,680,000.00	4,302,080,000.00
	Payment of other operating activities cash	2,076,860,000.00	2,087,680,000.00	2,168,850,000.00	2,155,130,000.00	2,533,000,000.00
	Total cash outflow from operating activities	13,770,138,000.00	15,594,970,000.00	17,317,810,000.00	17,883,750,000.00	20,611,640,000.00
Net cash flow from operating activities		1,127,880,000.00	1,094,142,100.00	1,509,441,200.00	3,360,992,000.00	3,283,994,000.00

Cash flow from investing activities						
	Cash receipts from disinvestment	2,522,870.00	56,891,700.00	30,000,000.00	2,919,160.00	0
	Cash receipts from investment income	11,135,000.00	3,659,520.00	3,442,580.00	10,646,500.00	7,830.00
	Disposal of fixed assets, intangible assets and other long-term assets recovered net cash	58,330,100.00	34,064,300.00	6,745,380.00	7,601,660.00	17,158,100.00
	Cash received from disposal of subsidiaries and other business units NET	0	17,184,200.00	7,886,500.00	943,577.00	1,216,080.00
	Cash receipts relating to other investing activities	5,050,000.00	26,423,800.00	205,733,000.00	23,613,500.00	660,727,000.00
	Total cash flows from investing activities	77,037,970.00	138,223,520.00	253,807,460.00	45,724,397.00	679,109,010.00
	To acquire fixed assets, intangible assets, cash and other long-term	600,751,000.00	1,068,890,000.00	893,052,000.00	720,350,000.00	1,103,500,000.00
	Cash investments	0	168,413,000.00	181,550,000.00	206,191,000.00	174,160,000.00
	Cash payments relating to other investing activities	5,345,250.00	15,531,900.00	33,192,700.00	29,066,500.00	166,271,000.00
	Total cash outflow from investment activities	606,096,250.00	1,252,834,900.00	1,107,794,700.00	955,607,500.00	1,443,931,000.00
Net cash flow from investing activities		-529,058,280.00	-1,114,611,380.00	-853,987,240.00	-909,883,103.00	-764,821,990.00
Cash flows from financing activities						
	Cash received from investments	15,703,000.00	0	5,085,000.00	1,187,680,000.00	0
	Obtain borrowing cash received	568,470,000.00	1,090,690,000.00	714,414,000.00	452,249,000.00	308,796,000.00
	Cash receipts relating to other financing activities	21,890,600.00	8,148,780.00	1,485,502,400.00	269,839,000.00	14,115,700.00
	Total cash inflows from financing activities	606,063,600.00	1,098,838,780.00	2,205,001,400.00	1,909,768,000.00	322,911,700.00
	Debt service paid in cash	876,781,000.00	646,388,000.00	1,356,100,000.00	762,529,000.00	309,098,000.00
	Distribution of dividends, profits or interest payments in cash	317,530,000.00	346,569,000.00	385,202,000.00	398,064,000.00	261,674,000.00
	Cash payments relating to other financing activities	47,037,700.00	3,758,340.00	21,708,700.00	277,623,000.00	12,679,300.00
	Total cash outflow from financing activities	1,241,348,700.00	996,715,340.00	1,763,010,700.00	1,438,216,000.00	583,451,300.00
Net cash flow from financing activities		-635,285,100.00	102,123,440.00	441,990,700.00	471,552,000.00	-260,539,600.00

Annex 3

Income statement

Period Ending	31/12/2006	31/12/2007	31/12/2008	31/12/2009	31/12/2010
Total revenue	11,832,800,000.00	13,709,200,000.00	16,023,400,000.00	18,026,100,000.00	19,897,800,000.00
Total operating cost	11,322,862,700.00	12,803,059,510.00	15,032,029,200.00	16,445,656,300.00	17,971,772,320.00
Operating cost	7,034,760,000.00	8,001,650,000.00	9,509,010,000.00	10,285,100,000.00	11,234,500,000.00
Sales tax and extra charges	1,171,630,000.00	1,322,010,000.00	1,424,150,000.00	1,547,310,000.00	1,663,130,000.00
Selling expenses	2,053,430,000.00	2,651,300,000.00	2,972,030,000.00	3,484,400,000.00	3,917,920,000.00
Management costs	703,844,000.00	667,262,000.00	902,134,000.00	998,141,000.00	1,079,200,000.00
Financial expenses	11,127,700.00	-5,883,490.00	45,613,200.00	62,853,500.00	4,872,520.00
Asset impairment losses	348,071,000.00	166,721,000.00	179,092,000.00	67,851,800.00	72,149,800.00
Operating income	509,937,300.00	906,140,490.00	991,370,800.00	1,580,443,700.00	1,926,027,680.00
Non-operating income	130,065,460.00	144,675,210.00	166,145,500.00	263,682,800.00	293,933,320.00
Non-business expenses	17,271,900.00	36,028,700.00	35,449,100.00	62,718,800.00	57,547,400.00
Non-current assets disposal los	6,483,860.00	10,667,000.00	13,977,200.00	42,077,700.00	39,213,600.00
Total profit	616,247,000.00	1,004,120,000.00	1,108,090,000.00	1,739,330,000.00	2,123,200,000.00
Income tax	179,015,000.00	406,119,000.00	374,318,000.00	440,220,000.00	538,780,000.00
Net profit	437,232,000.00	598,001,000.00	733,772,000.00	1,299,110,000.00	1,584,420,000.00